

HISTORIOGRAPHICAL REVIEW

THE INDUSTRIOUS REVOLUTION, THE INDUSTRIOUSNESS

DISCOURSE AND THE DEVELOPMENT OF MODERN ECONOMIES*

ALEXIS D. LITVINE

Trinity College, Cambridge

ABSTRACT. *The idea of industriousness has been an ever- recurring issue since Max Weber launched it as a putative explanation of the advent of economic modernity. The notion of ‘industrious revolution’ has provoked a renewed flourishing of publications focusing on this issue. Although most historians agree on the emergence of industriousness in seventeenth-century Europe, there is no consensus regarding the chronology, hence the real causes, of this mental and discursive shift. This article emphasises the problematic role played by literary evidences in these social and cultural models of diffusion of new consumer values and desires. It then establishes the timing of the emergence of the ‘industriousness discourse’ using an original approach to diffusion based both on the quantitative analysis of very large corpora and a close reading of seventeenth-century economic pamphlets and educational literature. It concludes first that there was not one but several competing discourses on industriousness. It then identifies two crucial hinges which closely match the chronology proposed by Allen and Muldrew, but refutes that championed by de Vries and McCloskey. The industrious revolution as described by these authors would have happened both too late to fit its intellectual roots and too early to signal the beginning of a ‘consumer revolution’.*

Hereticks divulge their errors [by] their
Industry or Diligence ; they are ... not onely
subtill, but industrious workers.¹

James Cranford

Where industry is scorned, let's welcome
sloth.²

Thomas Heywood

Remember that time is money.³

Benjamin Franklin

When authors of different kinds and in different
contexts were beginning to use similar
language, it is possible to argue that the
intellectual equipment of an important sector of
public opinion, that of the educated, was
shifting. By one route or another, and under the
cloak of the individual and collective pursuit of
happiness, acquisitive and competitive appetites
became as worthy of serious attention, if not
quite so respectable, as material progress.⁴

Paul Slack

What led to the development of modern capitalism? What caused the Industrial Revolution? These are two famous questions which historians of early-modern and modern Europe are always challenged to address and will most certainly never be able to answer in any definitive and comprehensive way. Whether we consider this to be the consequence of dealing with great social complexity or to be the torment of Sisyphus inflicted on social and economic historians, it remains true that most attempts to combine these two issues have proved to be a very constant pitfall in the literature and, with the discrediting of Weberian psychological analysis (in particular the economic effects of predestination) and Marxian economic determinism, have provoked a disappointing segmentation of the field between economic historians and religious and cultural scholars. This segmentation is seen in the growing disjunction between the realms of what used to be called ideology and economic structure.

This review could not pretend to solve the eternal riddle of the opposition between cultural and economic causes of the Industrial Revolution. However it looks at a recent flourishing of macro-theories (de Vries, McCloskey, Mokyr, Muldrew) that are trying to tie the two terms together into one single narrative related to the *longue-durée* emergence of industrious behaviours and industriousness discourses in Europe.⁵ The main point of this review is that chronological discrepancies over the origins and evolution of industriousness are far from being insignificant but reveal completely different understandings of the nature of industriousness and of the relationship between practices and discourses in history. The following pages will thus assess the competing chronologies in the historiography and try to establish, as firmly as possible, the timing of the emergence of the 'industriousness discourse'.⁶ I will start by explaining why literary evidence of industriousness is crucial for these authors, and go on to show that there is not just one discourse but several competing understandings of 'industriousness' whose chronologies are intertwined and constantly reinforcing each other.

I

The most influential account is probably the concept of the ‘industrious revolution’ put forward by Jan de Vries.⁷ In his most recent book, which will be the main focus of this review, he argues that the chronology of the Industrial Revolution should be pulled back to the seventeenth century to take into account the rising tide of consumerism, embodied by a general desire for new commodities, which started at this time in Holland and England. His main historical argument is that during the first half of the seventeenth century the diffusion of durable and exotic goods created new desires which households could only fulfil by increasing their income. *Ceteris paribus*, as economists like to say (i.e. with a constant relative price between labour and commodities), this could only take three forms: labour intensification (work harder and more consistently), labour prolongation (work longer) and/or labour amplification (increased participation to the labour market).⁸ Taken together, these composed the practical manifestation of de Vries’s industrious revolution.

Unsurprisingly, the book has reactivated very entrenched oppositions in the field but among the many critical reactions - albeit mostly justified⁹ - none seem to have looked at what are the really problematic elements at both ends of de Vries’s intellectual edifice: the origin of these new desires and the mechanisms of diffusion of the new economic *mentalités*. Historians have linked the emergence of industrious behaviour and industriousness discourses to a great variety of causes but, notwithstanding the nature of the arguments, all these analyses are confronted with a similar technical (not to say conceptual) problem: they have to explain how ideas were able to transform economic practices in the first place.

Although de Vries draws upon the consumer revolution literature, he rejects the classic, and indeed flawed, model of social emulation which posits that consumption patterns, i.e. tastes or desires, are communicated by imitation from one group to another, generally mimicking established social relations.¹⁰ Consequently, he comes up with a much more

general solution: he links the spread of industriousness to the emergence of ‘man as a “desiring subject” whose subjectivity is shaped by “desire” as a fundamental aspect of the self’ and who, in turn, given this new psychological framework, could contribute to creating ‘a society in which new forms of material culture spread broadly through society and transformed the practice and experience of consumption... on a so enduring basis ... [that]... the potential to purchase luxuries and novelties extended well beyond a small, traditional elite and where the acquired goods served to fashion material cultures that cannot be understood simply in terms of emulation.’¹¹ However, by turning the Frankfurt School’s critical take on consumption on its head, de Vries only pushes the problem further back, for it remains to be understood how this new ‘mode of subjectivity’ and these new desires appeared during the first decades of the seventeenth century and not several centuries before. Thus, he does not greatly differ from Marx’s own psychological analysis of industriousness as a natural quality of labourers caused by the illusory desire for money inherent to capitalist development. For Marx, however, it was the generalization of wage labour that created the material conditions in which the opposition between industrious and idleness (i.e. the destruction of traditional leisure time) could appear as a natural property of this new ‘species’.¹² Contrary to Marx, de Vries seems to be left without any obvious and immediate historical explanation of the advent of consumer subjectivity; on the one hand he pretends to reject economic determinism (either Marxian, i.e. the idea that economic relations determined peoples’ aspirations, or microeconomic’s consumer choice theory) and, on the other, he equally dismisses the model of social emulation of taste. Thus, if new desires are neither the result of deterministic environmental conditions (whatever these might be: economic, social, cultural), nor the result of imitation and civilisational process they would have to result from a concomitant interpersonal psychological transformation, i.e. a Weberian-type of evolution.

In fact, de Vries surreptitiously brings back part of the old historical determinism onto the main stage through his theoretical decomposition of the structure of consumers' desires into categories of pleasure and comfort and 'Old' versus 'New Luxury.' (See Table 1 below.) He argues that 'in the course of the seventeenth century [the latter] emerged in a sufficiently developed form to present an alternative to the Old Luxury that had lived in symbiotic tension with the leisure-rich society for many centuries.'¹³ The desire for these new goods 'can be best understood by linking fashion and taste ... to, for a lack of a better word, modernity.'¹⁴

Type of consumption	Traditional leisure-rich society	Modern 'affluent societies'
Comfort	Personal comfort (consumption reduces material pain or discomfort)	Social comfort. Serves to position the individual regarding other individuals: positional goods ('Old Luxury') and identity goods ('New Luxury').
Pleasure	Hedonism: immediate consumption or satisfaction of 'socially generated' and 'static' desires	Novelty: desire of desire, romantic posture of individual ever-changing desires

Table 1. De Vries's analysis of consumption

The intellectual cost of rejecting emulation or diffusionist models is thus greater than it first seems. As it implies relying on a theory of human subjectivity, de Vries's crucial assumption is based on very few evidential bases and leaves a fragile edifice exposed to the same criticisms (of subjectivity) that were formulated against Max Weber a century ago.¹⁵ Furthermore, there is a double chronological problem here: his industrious revolution happens either too early for the real diffusion of luxury goods among labourers or too late, hence losing their novelty, as they had been consumed by the wealthiest for at least several decades.

Well aware of this lack of reliable evidences de Vries operates his final twist by anchoring his narrative and especially its chronology to the 'vast body of moral debate, philosophical speculation, and political economic theorizing' produced by contemporary observers. In consequence, the temporality of the industrious-consumer revolution is to be based on this literary evidence: the 'industriousness discourse'.¹⁶ To be sure, de Vries does not think that literary occurrences caused the industrious revolution, but because he does not

have a credible model of cultural diffusion which could explain how and when these new desires spread among the population, these literary changes in the meaning of luxury and industriousness are his only proofs of a sudden valorisation of consumption.

The same conclusion applies to McCloskey's understanding of the relationship between 'bourgeois dignity' (i.e. merchants' talk, inventors' sociability and a cultural revaluation of commerce and invention) and the Industrial Revolution. Trying hard to distinguish her narrative from the deterministic pitfalls, she argues that

the initiating change was not psychological (as for example Max Weber claimed in 1905, and Robert Lucas in 2002), nor economic (as Karl Marx and Friedrich Engels claimed in 1848, and Douglass North in 1990), but sociological and historical and political. That is, around 1600 on a big scale in pioneering Holland, and then around 1700 on a bigger scale, and permanently, in innovating Britain, some of the elite began to re-evaluate the town and its vulgar and corrosive creativity.¹⁷

One could thus imagine that, given the importance of urbanization in this narrative, she would carry on to look at what defined urbanity in Britain and how this early eighteenth-century commercial revaluation was then diffused to larger circles of the population.¹⁸ Instead, she evades the question altogether by suddenly turning back to anthropology.

The market economy, [she argues,] contrary to what you might have heard, has existed since the caves. The anthropologist Jack Goody declares that "trade was essential to the growth of human life from the earliest times, including the institution of the market in the rise of some specialized individuals (later merchants)."

This being a proof that 'there is no change in human nature from olden to modern times, and [that] the attribution of a novel "rationality" to a society capable of world wars and modern sports seems at least strange.'¹⁹ Happily for all of us, 'toward 1800 many Northwestern Europeans, and toward 1900 other Europeans, and then toward 2000 many ordinary peoples elsewhere, came to accept the outcome of the market with more or less good grace.'²⁰

Although the story started as a sociological revolution, when one scratches the rhetorical surface it rapidly ends up solely relying upon a teleological narrative of individual acceptance; that is, the neoclassical model of allocation of preferences disguised under an ahistorical and pseudo-Christian psychological conception of mercantile dignity: ‘Among the seven principal virtues, faith is the virtue of backward looking, of having an identity. Keep the faith. Dignity encourages faith. You are dignified in standing, in being who you most truly are, and have been.’²¹ Following Liah Greenfeld’s²² (and Douglass North’s) stance on national dignity, McCloskey transposes this economic psychologism into an international model of diffusion:

during the 17th century the success of commercial Holland stuck in the craw of English people, the way the recent success of innovative Hong Kong and Taiwan stuck in the craw of mainland Chinese people, and inspired them to imitate. That chainlike causation of successive Bourgeois Revaluations is similar to the causation of nationalism in reaction to conquering nationalisms, English to French, or English to Indian.²³

Had McCloskey looked at what cultural and social historians have to say today about interactions between individuals, social groups and institutions (norms, beliefs and concrete institutions like the state) she would probably not have succumbed so easily to the chimera of a liberal, laissez faire, free-traders’ seventeenth century, which, as argued recently by Ashworth, neglects, among many other things, the entire mercantilist aspect of European commercial policies.²⁴

One could argue that it is unnecessary to be so punctilious about philosophical origins and that what really matters for historians - i.e., those only attached to facts - is that by 1750 industriousness did exist, either in print or in thoughts, as McCloskey would put it, the rest being only a problem of chronology.²⁵ This counterargument would have some credibility were these authors clearcut unabashed neo-classic economists who thought that people always wanted to be capitalists anyway - the only question that would then remain is why they could

not achieve it earlier in history. On the contrary, McCloskey insists on the rhetorical dimension behind economic choices: ‘language is crucial’ she says because ‘habits of the mind are habits of the lip.’²⁶ Consequently, the first trace of this change is to be found, like for de Vries, in literary occurrences of this new ‘talk’.²⁷

All would be for the best, but both de Vries and McCloskey constantly waver between the notion that literary evidence can demonstrate a gradual shift toward industriousness and the contradictory claim that they are not bound by this chronology as, under the disputable claim that ‘theory followed practice,’²⁸ they assume that texts are only a belated transcription or reflection of previous mutations in popular thought, which, as we have seen, they cannot prove but for these literary occurrences.

II

The main quantitative sources I shall use to assess the chronology of the diffusion of the industriousness discourse are the Google Ngram database developed by a group of Harvard researchers led by Jean-Baptiste Michel and a subset of the Early English Book Online (EEBO).²⁹ The former was published in 2009 and revised in 2012; the 2009 version contained a corpus of 5,195,769 digitized books; that is to say, roughly 4 per cent of all the books ever published from the early sixteenth-century to the present while the increased 2012 version reaches almost 6 per cent. Given the geographical focus of this article I have further limited the corpus to books published in Britain. To be sure, this is not exempt from selection biases; as Google has ‘only’ digitized books from the collections of public libraries; collections which represents what librarians have deemed interesting or significant enough to be bought rather than all cultural production. Although this could constitute a major pitfall for controversial issues or topics such as sexuality, deviant behaviours or anything which might have been censored, it should not carry too much weight in the present case. If anything, moral, religious and economic discourses about industriousness would rather be

overrepresented. Yet, to control for this bias in book selection I have compiled a secondary database listing all the occurrences of ‘industrious’ vocables in seventeenth and eighteenth-centuries newspapers from the The Burney Collection held at the British Library. (See fig. 2.2)

The second potential problem is the inclusion of the medial f form in older publications, together with other OCR-related (optical character recognition) issues in general. As the work by Michel *et alii* convincingly addresses this technical issue I shall consider their result reliable enough.³⁰ The third problem is related to the limited amount of data available before 1701: any occurrence of a word tends to create a giant spike that makes relative frequency analysis less significant compared to later periods. The subset of the 2012 database I have used only includes 1,850 books for the period from 1524 to 1700, which represents, if we take the EEBO corpus as a reference, only 1.5 per cent of all the books published in English between these dates.³¹ Thus, in order to limit the effect of this distortion I have added to the Ngram corpus my own database including more than 200 books (not included in the original Ngram catalogue) published between 1543 and 1700 from the digital collections of the Open Library (Fig. 8).³² I have also been able to apply the same frequency analysis to more than 50,000 fully searchable records from the EEBO-TCP corpus.³³ (Fig. 1.3) Despite their imperfections the combination of these different samples allow me to confirm the significance and robustness of my results.

Another issue related to the reliability of older frequency data is the long overlap of scribal and printed material throughout the sixteenth and early seventeenth centuries.³⁴ There is unfortunately no simple quantitative solution to this problem, but given that manuscripts were relatively well distributed across the publication scope, we can assume that it only reduces the size of the sample but does not radically modify the results.

Finally, there is also a fundamental problem with publications in the steam-press era (i.e. roughly after 1830). By allowing very large editions to be printed, it radically expanded the circulation and diffusion of some works, and the gap between these widely diffused books and more confidential publications dramatically increased during the second half of the nineteenth-century. Thus, after 1830 in order to reflect the diffusion of each book occurrences should be weighted according to the size of editions. This is unfortunately impossible, mainly because such records do not exist.³⁵ Another conceivable option would be to try to weight each record by the number of libraries currently holding the volume. Needless to say, this would be unreliable, very hard to systematize, and probably fraught with the same initial bias. Furthermore, this is what to a certain extent the Ngram database indirectly does as it is essentially a reflection of university libraries' collections. Digitized books were therefore deemed interesting enough or significant enough to be bought. This does not fully counter the artificial cultural levelling-up of these occurrences, but it does, perhaps, slightly moderate its effect.

Moreover, this short overview does not pretend to determine the importance of individual texts or authors, for, as Peter Mandler recently put it in an article about cultural history, although 'the question of "representativeness" or "influence" can be resolved in a simplistic way, by counting editions or measuring circulation or even by monitoring references in literary reviews ... texts gain power not only from the breadth of their circulation but also by the imaginative work they do.'³⁶ In sum, following Mandler's Kantian terminology this application of quantitative analysis to texts only intends to extend, as exhaustively as possible, this 'phenomenal' approach to literary diffusion and chronology.³⁷

Despite all these caveats, a simple statistical analysis shows that there is a clear subdivision of 'industriousness' discourses into six periods (labelled A to F in figs. 1 to 8 below). Before the last decade of the sixteenth century very few volumes in the database

include the word ‘industrious’ or any of its derivatives - including spelling variants and medial f forms, and its frequency also remains extremely low, under 0.0002%, which means that it represents less than one word out of 500,000. (Fig. 1.3) Books which do contain it, like the 1533 translation of Erasmus’s *De Contemptu Mundi* by the Austin canon Thomas Paynell, use it either as a moral quality, synonymous with ‘laborious’, or negatively as a synonym of harmful and mischievous (in its seventeenth-century meaning).³⁸ Furthermore, it is difficult to find any significant religious divide regarding sixteenth-century usages of the term ‘*industrie*’ and its derivatives: in this matter Elizabethan churchmen and authors such as John Foxe and Richard Mulcaster did not differ from the definition given by a devout Catholic like Thomas Blount in his *Glossographia, or, A dictionary interpreting all such hard words, of whatsoever language, now used in our refined English tongue*, or a Puritan like Robert Cawdrey in his *Table alphabeticall*.³⁹ The relatively high frequency of ‘industrious-family’ words during the late sixteenth century observable in Fig.1 is an artefact caused by nineteenth and twentieth-century reissues, which are artificially matched with their date of first publication by the OCR programme, hence creating these sudden and unrealistic spikes.⁴⁰ As very few publications used the old spelling after the 1790s, - Fig.1.1 clearly shows this typographical transition - the difference between the light grey line (for modern spelling) and the dark grey line (for ancient spelling) in this chart allows us, nevertheless, to distinguish easily between the two phenomena, and also shows the extent to which some books might have been counted twice. The same applies to the two peaks in 1615-1625 and 1635-1645 - the dark grey line shows that there was no real surge in interest in the former period while the latter witnessed the first significant (and detectable) rise in use of the word ‘industrious’. The light grey line illustrates, instead, a retrospective interest in these publications exemplified by their reissues and acquisition by libraries during the nineteenth and twentieth centuries. This disproportionate weight is also, I think, a sign of a long-lasting academic fascination with

early English political economy, in which many historians, sociologists and economists tried to locate the origins of a range of things from economic modernity to capitalism. These books which were republished and bought by libraries after 1800 were also disproportionately interested in ‘industriousness’. This is shown by the fact that while the average frequency of the modern spelling of the word *industrious* surges (Fig. 1.1), the average frequency of books using it at least once is not much higher than those using the old spelling (Fig. 2.1); hence the books in question must contain many more occurrences of the term.

This argument should not, however, hide the renewed appeal of ‘industriousness’ in the first decades of the seventeenth century. The term ‘renewed’ can be misleading though, and I want to argue here that rather than a resurgence of previous moral understandings of ‘*industrie*’ it was the addition of a new layer linked to commercial enterprise, much earlier than de Vries thought, starting around 1600 (see figs. 1.2, 1.3 and 8), essentially through the work of early British mercantilists, which underpinned the religious reformulation of ‘industriousness’ characteristic of Weber’s analysis of predestination.⁴¹ The writers in question were mostly merchants, either trying to justify trade monopolies and often linked to the East India and Virginia Companies, or seeking royal protection from imports of foreign goods. Thus, it was rhetorically convenient to establish a parallel between the common religious attack on sloth - generally using the new 1611 King James Bible translation of Prov. 15.19: ‘The way of the slouthfull man is as an hedge of thornes: but the way of the righteous is made plaine’ - and a model of social organization in which industriousness would contribute to the wealth of the nation and, by extension, to the glory of its sovereign.⁴² This proto-‘national economy’ argument took shape in the early seventeenth century and the correspondence between microcosmic (individual) and macrocosmic (social) qualities relied on a twofold comparison: first, a series of zoological metaphors and anthropomorphisms attributing industrious virtues to animals such as ants or bees, and, second, the definition of

the Dutch as paragons of industriousness, wealth and power.⁴³ Although the former comparison had existed at least since the antiquity⁴⁴ - it was Charles Butler's *The feminine monarchie, or the historie of bees*, published in 1609, which gave bees their formal credentials as the industrious mascot of British political economy.⁴⁵ Six years after the publication of Butler's *Historie of bees*, the politician, diplomat and merchant Sir Duddley Digges went a step further in his defence of the East India and the Virginia companies by associating merchant adventurers with busy bees, which 'from furthest parts abroad, ... fetch and bring the hony to the Hive, laborious Bees, they clothe and feede the poore, and give the willing man imployment to gain with them, and with the Common wealth, the honour and the riches.'⁴⁶ This clearly shows that the rhetoric of the civilizational value of trade, or 'Sweet Traficke,' did not emerge in England in either the 1690s (de Vries) or the 1700s (McCloskey) but seventy-five or eighty years earlier. Similarly, if one accepts de Vries's argument for the pre-eminence of political economy (theory of commerce) in the diffusion of the social acceptability of consumption, the origin of this would also be found in the decade from 1615 to 1625. Digges himself, for example, answered the objection that these imported

commodities [were] unnecessary ... In strict terms of need, our Land that flows with foode ... may *Bee*, without all other Nations, but to *Bee Well*, to flourish and grow rich, we must find vent for our abundance, and seeke to adorne us out of others superfluities.⁴⁷

It is true that the mercantilist controversy of the 1620s feverishly disputed the claim that imports of exotic goods were beneficial to England but they did not reject the economic interpretation of industriousness. Thomas Mun preferred a combination of frugality and industriousness which would improve the balance of trade: 'wherefore, industry to encrease, and frugalitie to maintaine, are the true watchmen of a kingdomes treasury; even when, the force and feare of Princes prohibitions cannot possibly retaine the same.'⁴⁸ In the context of the trade depression of the 1610s, industriousness was not only opposed to prodigality (aimed at the upper crust of consumers, who could afford luxury goods) but also to popular idleness.

Another merchant polemist, Edward Misselden, defending Mun against the attacks of Gerard de Malynes, explained that ‘the causes of our under-ballance of Trade, might be contracted in two words ... Poverty, alas, and Prodigality ... there were never more people, never less employment: never more Idleness, never so much Excess!’⁴⁹ Mun himself echoed this formulation in his subsequent pamphlet *England's Treasure by Forraign Trade* in the 1630s, in which he defends the morality of personal enrichment when it benefits the nation as a whole, especially by providing employment to the poor. Labour is a commodity that should be employed, not wasted, says he, and ‘there is more honor and profit in an Industrious life, than in a great inheritance, which wasteth for want of vertue’.⁵⁰

As mentioned previously, the second noticeable fact about the emergence of the industrious discourse in the early seventeenth century was its close association with the Dutch. It is not exaggerating to say that the word industrious had by then become their Homeric epithet in England.⁵¹ What was so different about Holland from the vantage point of these writers? It was not the diligence and industry of its merchants but the general activity and participation of the entire society in the pursuit of wealth and power that struck these writers. In a surprising attempt at national psychology Robert Burton claimed that

our land is fertile we may not deny, full of all, good things, and why doth it not then abound with cities, as well as Italy, France, Germany, the Low countries ; because their policy hath been otherwise, and we are not so thrifty, circumspect, industrious, Idlenesse is the malus Genius of our nation.⁵²

This correspondence between the revaluation of economic individual virtues and rising national political economy is a significant marker of the commercial turn in industriousness discourse during the first half of the seventeenth century (period B), as diagnosed in the 1620s by Gerard de Malynes: ‘I thought good to remember this for our posteritie, for there may come a time that industrious men shall be more regarded.’⁵³

This seems at a first glance to reinforce de Vries's and McCloskey's revaluations of the 'commercial talk' type of argument. I would like, however, to point out three necessary nuances. First, this commercial redefinition of industriousness happened earlier than both authors are ready to acknowledge, even regarding popular behaviour. Hence it mostly rules out the causation de Vries attributes to Jansenist thought, which derives from his emphasis on the influence of Bayle and Nicole on Mandeville.⁵⁴ In 1609, for example, an anonymous author had, quite astonishingly, already diagnosed that

Ingratefull and hard hearted are many of our age, respecting none but such as profite and pleasure them at the instant: industrious, therefore, ought you be to get your master's favour; and having gotten it, circumspect to keepe the same ... for hee that might doe well and would not, when hee wanteth shall be unpittied, and when you become old, and poore too, then shall you be spurned with the heele of disdaine by every foote-boy; rejected as an old woman which spent her youth wantonly ; then shall you heare of your olde vagaries, your former follies shal be laide in your dish: if in your jollity you wronged any, they will wait for revenge in the time of your want and weakenesse: when the lion was olde and toothlesse the asse revenged an inveterate injurie he had sustained long before: but now you are in place, if you demeane yourselfe honestly now you are young, preserve that you get carefully: now you are in service, performe it faithfully: you may hereafter purchase much comfort, goods, and credit.⁵⁵

Second, rather than a diffusion from Holland to England, this seems to indicate that this discourse was a genuinely British syncretism, a point that would have become self-evident had these authors also considered competing early seventeenth-century formulation of 'industriousness' in the Netherlands, France and Spain. In brief, what made England so special in the 1610s was not the intellectual and religious genealogy of industriousness, but the situation of those merchants and polemicists engaging in a public debate over commercial and economic policies. The condemnation of idleness, often associated with monasticism and considered a source of moral and physiological disorders, was already a trope of Elizabethan Calvinist and Puritan discourses.⁵⁶ Thus, what is noticeable in Henry Montagu's claim that

‘were a calling but to keepe a man from idlenesse, it were a goodnesse : for the industrious man is seldome at leisure to sinne ; whereas the idle man hath neither leisure nor power to avoid sinne. Industry in any calling makes a man capable of better imployment, whereas Idles are fit for nothing but temptations.’ is not the fact that he was a Calvinist but, rather, that he was a government official interested in commercial policy and had previously been a director of the Virginia Company.⁵⁷ In sum, although religion was still the rhetorical substratum it was not the prime mover of this intellectual transformation in which merchants - of all denominations - participated. A telling example of this commercial reformulation of the ‘classic’ moral discourse about industriousness is the 1640 *Sermon of Buying and Keeping the Truth* by the lifelong minister of Epping, Jeremiah Dyke:

The seller sets one price, and the buyer offers another, but if the buyer offer too low a price, hee must rise and come to the sellers price if hee will have his commodity. It is not enough then if wee will buy the truth to offer a price, and give a price, but wee must give Gods price, that is, the full price. Now Gods price, the full price is this, it stands in these two things: First, in an industrious, painefull, serious use of meanes. The use of meanes is a price, but the full price is the serious industrious use of the means, the using of the meanes with all our might. Then shall wee know if we follow on to know the Lord. Many pray, heare, reade, &c. and yet buy not the truth, nor get knowledge, nor grace.⁵⁸

The third necessary nuance to de Vries’s and McCloskey’s narrative starts as a methodological point but leads to a crucial factual mistake. It is linked to the quasi-teleological nature of the argument and especially the illusory quest for the origins of industriousness and economic modernity. In terms of causal analysis, both rely on the twofold questionable assumption that there was a historical disruption (located at this mythical radix) followed by a real continuity in perceptions, usages and representations. Even if there was a transformation in the meaning of industriousness and in the perception of luxury and consumption in the early seventeenth century, nothing proves that this was at the root of changes in the early eighteenth century. The commercial reformulation of the luxury debate, which is at the hearth of de Vries’s analysis, was not linear either, and as it was composed of several divergent moral, aesthetic and commercial strands, it would be dangerously reductive

to pick one of these competing discourses to explain developments happening a century later.⁵⁹ It is particularly unfortunate to look for or project twenty-first century economic psychology onto these texts as it creates a chronological dichotomy, which neither reflects what people thought at the time, nor successfully explains subsequent evolutions in popular representations of the economy.

As the charts below show, there was a clear disruption in the usage of industriousness during the years of the Civil War in terms of both relative usage frequency (Figs. 1.1 and 1.2) and the relative number of books (Fig. 2.1 and 2.2). The same level of frequency was only reached again in the 1660s. Furthermore, this interruption does not seem to be a direct effect of reduced publications due to the war as the absolute value of the number of books remains roughly constant. (Fig. 3) Instead, it is the consequence of both a contemporaneous decline in interest and an *ex post facto* selection bias due to librarians shifting their attention to other matters, like, in the first instance, the Civil War. All this indicates that the commercial discourse of industriousness did not disappear but did not prosper either. By following Phil Withington's method one can also corroborate this relative momentary decline by looking at the frequency of the word 'industrious' in books included in the ESTC Title-Pages catalogue (Fig. 7).⁶⁰

In addition, the importance given to commercial 'industriousness' by McCloskey and de Vries also partially derives from a selective use of textual evidence, focusing mostly on commercial treatises, which overlooks other types of religious, literary and educational texts. The latter category is the most conspicuous negligence. John Sommerville, in particular, has shown that there was a 'disjunctive tradition' in Puritan children's literature in the late sixteenth and early seventeenth centuries: on the one hand, the courtesy (humanist) strand, aiming to foster good behaviour, and, on the other, the religious rejection and appeal to children's vocations and piety. This split was caused by a more secular approach to

childhood, which appeared in the 1590s and used the rhetoric of a ‘youthful nationalism’ fuelled by the wars with Spain. One of the most telling examples of this new educational moment was the parable of the two apprentices, which appeared for the first time in English in the famous play *Eastward Ho* by Chapman, Jonson and Marston in 1605. This embodied the new theme of adult-age (i.e. worldly) reward, transposed from the classic account of Christian post-mortem recognition and adapted to the seventeenth-century work environment.⁶¹ ‘This new language for children made its way to seventeenth-century Puritans’ books which were ... almost the only one available’⁶² and by the end of the century Anglican writers fearing atheism also started to write children’s books from a semi-Pelagian perspective, claiming that good moral habits were the basis of religion. Although they still strongly condemned the ‘desires of the riches,’ i.e. luxury consumption, they were now using the language of earthly rewards (‘be rich’), of which the apprentice marrying his master’s daughter was becoming the tutelary figure.⁶³

This also shows that there is no simple conjunction between early industriousness discourses and rejection of consumption, as argued by de Vries. Furthermore, the seventeenth-century moral commitment to industry was also often opposed to spending and luxury, too, and the industriousness literature did not necessarily embrace ‘new consumption’ after the end of the seventeenth century. First, as argued by Hont, the landmark of the so-called demoralisation of luxury, Mandeville’s fable, ‘was not an encomium of luxury as such, but a defence of the English economic and political regime created by the Glorious revolution, and its foreign policy, against a Jacobite counter-revolution’ that promised to ban luxury and reform society.⁶⁴ It is true that Mandeville contributed to shift the focus of the debate by redefining the meaning of luxury as a historical notion which ‘instead of being a slippery slope of corruption, [embodied human civilisation and] the ascent of mankind from animal-like poverty to modern welfare.’⁶⁵ Yet, influential as this reformulation was, it

remained bitterly contested even among eighteenth-century philosophers and early political economists, and although it used 'industriousness' in a different way than the older community-driven discourse it certainly did not supplant it.⁶⁶ It is challenging to find reliable quantitative evidence showing the relative evolution of these two strands during the eighteenth century, however as Mandeville so vehemently opposed the economic consequences of 'frugality' and 'prodigality', claiming that

Frugality is like Honesty, a mean starving Virtue, that is only fit for small Societies of good peaceable Men, who are contented to be poor so they may be easy; but in a large stirring Nation you may have soon enough of it. 'Tis an idle dreaming Virtue that employs no Hands, and therefore very useless in a trading Country, where there are vast Numbers that one way or other must be all set to Work. Prodigality has a thousand Inventions to keep People from sitting still, that Frugality would never think of; and as this must consume a prodigious Wealth, so Avarice again knows innumerable Tricks to rake it together, which Frugality would scorn to make use of.⁶⁷

it is possible to assess their importance by looking at the frequency of these terms and their most common derivatives. Fig. 5 clearly shows that before the eighteenth century 'prodigal' vocables were more frequently used than 'frugal' ones (on average 1.45 times more before 1725), whereas from the mid-1720s until the mid-1820s 'frugal' became more frequent than 'prodigal' (on average 1.23 times more frequent between 1725 and 1825), and the relationship reverted to its initial state after this date. This seems to indicate that the older discourse on industriousness remained very popular throughout the eighteenth-century, but it also points at the temporary redefinition of the meaning of 'prodigality' (briefly associated positively with 'industriousness' during the eighteenth century) as an effect of the 'Mandevillian turn.' The evolution of the two frequency series represented in fig.5 illustrates this point, too. Whereas, before 1710 and after 1810 'prodigal' and 'industrious' were barely related, during the eighteenth-century the two series clearly move together much more closely than ever before, or after. In more technical terms, only in this sub-period, are the two series cointegrated.⁶⁸

Second, according to Mandeville there is no immediate relationship between the traditional meaning of luxury (hedonism) and industriousness. Desire could not be the real

engine of the sort continuous material progress he called luxury, for all worldly pleasures could eventually be satiated. On the contrary, he saw industriousness, fuelled by pride, as the antidote to the inherent cyclicity of self-gratification rather than a consequence of the desire for new consumer goods.

Finally, the simplistic conception that a discourse – notwithstanding the label of ‘influential’ retrospectively bestowed upon it by twentieth-century commentators – could have casually replaced another neglects the entire social and spatial dimension inherent to the circulation and diffusion of these ideas. A telling example of the complexity of these mechanisms is the English translation of Psalm 104:23. Coverdale’s first translation in 1535 reads ‘Then goeth man forth to his worke, and to till his londe untill the evenynge’, which was only slightly modified in 1552 (‘Man goeth forth to his work, and to his labour, until the evening’) before being included in the Book of Common Prayer in 1662. In 1637, however, King Charles commissioned the Archbishop of Canterbury, William Laud, to draw up an Anglican prayer book for the Church of Scotland, in which the verse became: ‘Industrious Man drawn forth with Cares, doth then his Work begin, and plies his guiltless Husbandry, till Night doth call him in.’ Although this prayer book was never fully accepted by the Church of Scotland, it was adopted after 1688 by Scottish Episcopalians and, hence, was widely used throughout the eighteenth century. This shows both that ‘hard-working’ was already a common meaning of industrious in the 1630s and that the temporal and spatial diffusion of its usage was not as linear as McCloskey claims. She gives the example of the word ‘honest’, which, says she, chiefly meant noble in the seventeenth century but came to be understood a century later as ‘dignified as an ordinary person’ and ‘truth-telling’; that is to say, ‘reliable in a bourgeois way for making deals’.⁶⁹ Taking the same example, however, Muldrew shows that the meaning of economic reliability already existed in the seventeenth century, and the same point was also forcefully made by Jennifer Richards who explained that by the end of

the second half of the sixteenth century ‘the definition of ‘honesty’ as truth-telling and thrifty self management [was already] established.’⁷⁰

This leads us now to considering the second chronological hinge, which was put forward by Muldrew in his most recent book. He argues that discourses about institutions together with ‘the perception of the social structure to differentiate between labouring poor and idle existed after 1550’ but that a true discourse of ‘industriousness’ appeared only during the Commonwealth period, especially among members of the so-called Hartlib circle.⁷¹ Plotting the evolution of the frequencies of ‘industrious’ and ‘idleness’ (Fig. 4) allows us to see that there exists a clear correlation between the two words. Although this representation is far from faultless, the visual pairing of the two terms corroborated by the data obtained from the ESTC Title-Pages catalogue (Fig. 7) and the Open Library-Bookworm analysis (Fig. 8) indicate a real overall change in the nature of industriousness discourses during these years and the diffusion of a new association between industriousness, labour and poor relief.

Samuel Hartlib did not himself extensively contribute to the development of the industrious discourse but, by stitching up together all the pieces inherited from previous periods, he nevertheless played a pivotal role in the diffusion and extension of industriousness to new realms. By uniting a large circle of correspondents and publishing their writings he combined the strands of Utopian writing, educational (religious and moral) literature, early statistical publications and political economy. His *Reformed Commonwealth of Bees*, published in 1655, is a telling metaphor about this duality, encompassing social, political and cognitive organization, which reflects the variety of contributions during these thirty-five years. What qualitative analysis shows is that during this period the industriousness discourse was being imported into many different types of publications. The most relevant to our analysis is the social and moral translation of the proto-national economy argument (to put it simply: ‘commerce provides employment and creates welfare’). This was developed in the

previous period and continued to be efficiently used by authors such as Henry Parker, in his defence of merchant adventurer privileges against Leveller attacks in the 1640s, Walther Blith (1649), Thomas Papillon (1677), William Petyt (1680 and 1683) and Samuel Fortrey.⁷² The latter, in his 1663 treatise *England's Interest*, argued that

on [our manufactures] chiefly depends both the wealth and prosperity of this kingdom: for by the increase and encouragement thereof, the Subjects are employed in honest and industrious callings, maintained and preserved from want, and those mischiefs which commonly attend idleness: the people furnished at home with all things both of necessity and pleasure; and by the overplus procure from abroad, what ever for use or delight is wanting.⁷³

As Petyt explained, the logical consequence of this 'common good' version of the industriousness argument was that fostering industrious behaviour was to be incumbent upon the whole community and its institutions, for

... if Peace be procured, easie Justice maintained, the Navigation not clogg'd, the Industrious encouraged, by indulging them in the participation of Honours, and Employments in the Government, according to their Wealth and Characters, the Stock of the Nation will increase, and consequently Gold and Silver abound, Interest be easie, and Money cannot be wanting.⁷⁴

Therefore, together with Petyt, a group of statisticians undertook the daunting task of establishing the extent and consequences of the need to promote industriousness. One of the most telling examples of this endeavour was Petyt's friend John Graunt, who advised against the perverse moral effects of subsidized employment for the poor in his *Natural and Political Observations ... upon the Bills of Mortality* and suggested instead that only 'beggars should be kept and fitted for work'.⁷⁵ This strand of statistical discourse about industriousness was often quite sympathetic toward the Anglican anti-ascetic and material virtues analysed previously, for it saw individuals as naturally inclined to pursue their own interests but corrupted by either an excess of pleasure or an absence of dedication (industriousness), which, thence, should be inculcated in them. They agreed with the teaching of clergymen like

Richard Allestree, who claimed that ‘our honest industry and labour is the means by which God ordinarily gives us the necessaries of this life; and therefore we must by no means neglect that: “He that will not labour, let him not eat, says the Apostle”,’ quoting 2Thess. 3.10.⁷⁶ This individual premise was made even more explicit by commercial writers like Blith, who thought that ‘all men are thirsty enough after profit and increase, yet few studiously industrious in this designe.’⁷⁷ John Houghton, a pharmacist and tradesman dealing with exotic products such as coffee, chocolate and spices but also the first and most famous practitioner of Hartlib’s precepts regarding the centralization and diffusion of market information, also considered the psychological preconditions of this economic emulation:

our height puts us all upon an industry ; industry makes every one strive to excel his fellow, and by their ignorance of one anothers quantities, make more than our markets will presently take off; which puts them to a new industry to find a foreign Vent, and then they must make more for that market; but still having some over-plus they stretch their wits farther, and are never satisfied till they ingross the trade of the Universe. And something is return'd in lieu of our exportations, which makes a further employment and emprovement.⁷⁸

Although it is when looking at these pre-Mandevillian discourses about consumption and industriousness that de Vries’s analysis seems the most convincing, I would like to suggest that his insistence on market-oriented and ‘utility-maximising’ economic activity constitutes a misreading of the individual psychological premise as used in these texts, which he too easily equates with the neoclassic economic axiom that informs his model of consumption. It is not only very reductive to argue that ‘the century-long debate on luxury ... can be said to culminate in the work of Adam Smith,’ but, without retrospective blinkers, it becomes obvious that the moral principle at the root of this new discourse on industriousness was not the pursuit of individual gratification (immediate or future) or, as Weber argued, the confirmation of divine grace, but a duty to improve the community.⁷⁹ This is what John

Sommerville also concluded in the first systematic quantitative analysis of Puritan publications between 1660 and 1711:

[Interregnum] Anglicans were far more likely to discuss work than were Dissenters (2.8 percent of paragraphs to only 0.6 percent). The authors who were most insistent on the subject were those Anglicans who were least “evangelical” or conversionist in their doctrine. They can be described as moralistic in their understanding of Christian piety. Or, in theological terminology, they were closer to Pelagianism than to the Augustinianism or Calvinism characteristic of Puritans. These authors, especially Richard Allestree, Jeremy Taylor, and Edward Lake, were the Dissenters' bitterest and most outspoken enemies... In short, the works which placed most emphasis on industry within one's vocation were those which saw religion in terms of man's duties and self-denial rather than of God's grace.⁸⁰

Thus, after 1650 this ‘anti-puritan work ethic’ was rather linked to what Paul Slack and Muldrew have described as a shift from a discourse stressing the need for reform to an emphasis on (moral and economic) improvement which was based on what these writers perceived as unmistakable economic betterment during the second half of the seventeenth century.⁸¹ Fig. 4.2 clearly shows the emergence of this ‘improvement’ literature in period C with the frequency of ‘improvement’ going up from 1 word in 1,000,000 in the 1630s to 1 in 40,000 by the 1670s, and its close correlation with the ‘industrious’ literature that lasted until the first decade of the eighteenth century when the new self-interested consumption literature exemplified by Mandeville began to circulate. Between 1640 and 1710 the two time series are indeed strongly cointegrated whereas they are not anymore in the subsequent period.⁸²

That material conditions were improving and ‘that the Power and Wealth of England has increased these last forty years’ had become so conspicuous that an author like Petty did not feel it necessary to demonstrate it anymore, leaving ‘to the consideration of all observers whether the Splendor of Coaches, Equipages and Household Furniture have not increased since that time.’⁸³ This perception of material improvement also went hand-in-hand with a deep and progressive movement of adaptation to the material world of luxury (rather than a

sudden demoralisation) which had been gaining ground since late Jacobean times.⁸⁴ Tellingly, whereas in previous periods epithets such as ‘industrious’ and ‘diligent’ were chiefly reserved for Dutchmen, they were now happily applied to the ‘brave, industrious, free-born English man’, too.⁸⁵

Also, these contemporary perceptions are corroborated by recent reconstructions of real wages and GDP per capita levels. Goldstone’s figures, together with more recent contributions by Allen, Clark and Van Zanden have stressed the upturn in English real wages during the second half of the seventeenth century, following more than 150 years of decline.⁸⁶ Similarly, Broadberry has calculated that GDP per capita grew by 27.2 % in England during the second half of the seventeenth century while it had only increased by 1.4 % over the entire previous century.⁸⁷ It is true that Maddison has a more optimistic perception of sixteenth-century GDP growth, leading him to stress the continuity between 1500 and 1800, but the gradualist turn in the historiography of the Industrial Revolution, together with our knowledge of demographic history, nevertheless tends to favour Broadberry’s and van Zanden’s type of figures.⁸⁸

Although these figures show general economic betterment, it is worth noting that until the 1680s the industriousness discourse was mostly aimed at a select group of wealthy individuals who could afford not to work. After this date, however, the effect of rising wages which, as many early modern historians have argued,⁸⁹ had been reinforced by two decades of negative population growth after 1650,⁹⁰ caused alarm among many landowners, popular journalists and economic observers.⁹¹ The main problem for them was that such a high level of wages did not allow them to discriminate “naturally” between industrious and lazy labourers, as the former could work less and enjoy as much or even more leisure, while the latter were not encouraged to work hard because of common land and overly generous Poor Law provisions. This has come to be known among economic historians as the hypothesis of a

backward bending slope of labour demand. However tempting it might be to read back microeconomic models through these comments, it is crucial to note with Muldrew (and against Hatcher) that ‘the idea of leisure preference being a general attribute of labourers is really something which comes from negative comments by observers like Defoe and cannot be generalized to the labouring population as a whole.’⁹²

These negative comments contributed to the entanglement of industrious and luxury discourses. Thus, after 1680, religious, moral and economic fulminations against popular luxury consumption became (anew) a key element of industriousness discourses but this time linked to the issue of the cost of poor relief. The previous pragmatic toleration of luxury linked to the general interest literature was replaced with a reactivation of theories of social discrimination relating to consumption (i.e. sumptuary laws or, as Sir Josiah Child elegantly put it, ‘protection against the vice of luxury’)⁹³ and mercantilist condemnations of imported goods.⁹⁴ Even Nicholas Barbon, who is presented by Slack and de Vries as the paragon of this new general attitude toward consumption, argues that in an ideal society the poor should produce and the rich consume.⁹⁵ The tolerability of consumption, even for a nation as a whole, thus depended upon economic and social status, as the great Scottish lawyer Sir George Mackenzie explained:

I confess, that Rich and Trading Nations, such as England, may be allow'd greater Scope to Sumptuousness; as Men who have great Revenues, without the least Imputation Of Luxury, do live proportionably to what they possess, without being censured by any Reasonable Man for so doing.⁹⁶

This twofold extension meant that the idea of general interest became subordinated on the one hand to an individual’s economic role as determined by social status, and on the other hand to the need for national industries to emulate and overtake foreign productions. The industriousness argument was thus split between those who argued for popular moral education linked to increased sensibility towards the cost of poor or, like the Societies for the

Reformation of Manners in the 1690s, for an anti-vice crusading which was as much part of the religious critique of luxury as it was a response to contemporary urban social problems,⁹⁷ and those who favoured a political economy version which used 'industrious' as the quality of a thriving and competitive nation.⁹⁸ The former tended to insist on moral reformation – aimed mostly at the poor – and the rejection of luxury following the common assumption that all vices were connected (i.e. idleness and excessive consumption necessarily led to crime, sexual promiscuity and whoredom), the latter on liberty, emulation and improvement, using such popular heavyweights as Defoe, Mandeville and those writing under the pen name Cato, who were all extremely suspicious about both the methods and effectiveness of reformation societies, which, they thought, often had the unintended effect of perpetuating vice rather than eliminating it.⁹⁹ The latter - in a letter written by John Trenchard - explained that the state could instead 'naturally' discourage these nefarious passions by promoting more favourable desires for economic betterment and luxury goods:

It is not the extent of territory, and vast tracts of barren and uncultivated land, [he argues,] which make states great and powerful, but numbers of industrious people under a proper oeconomy, and advantageously and usefully employed ... The impossibility of subsisting by idleness renders them industrious, emulation rouses their ambition, and the examples of others animate them to desire to live in splendor and plenty; and all these passions concur to set their hands and wits to work, and to promote arts, sciences, and manufactures, to strike out new trades, form new projects, and venture upon designs abroad, to enrich their own country at home.¹⁰⁰

However, despite the fame of these polemicists, there is no doubt that in the two last decades of the seventeenth century the rigorous morality of the first strand largely dominated the publication scene and the consequence was that for the majority of the people, to whom the conjunction between the pursuit of private interest and the common good had simply never been applicable, luxury consumption was now even more vehemently negated and industriousness even more prescribed by these authors. Slack detected the same rhetorical

decoupling in the new ‘criticism of workhouse functioning that opened the door to the disconnection between private interest and public good’; stressing that even charity could miscarry and have perverse social and economic effects. Against these critics of the workhouse the discourse of the reform of manners was reactivated: restoring frugality by educating ‘a virtuous and laborious generation’.¹⁰¹ This was one of the main elements of the pamphlets and economic treatises addressing this moral shortfall after the 1680s; stressing industriousness as a social value linked to the economic and psychological cost of poor relief.¹⁰² Child’s *Discourse about trade*, begun as a pamphlet in 1668 and then extended into a book in the 1690s, reflects this duality between moral and economic arguments. In order to reject the view that high interest rates could work as a sumptuary law he argues that

Luxury and Prodigality are as well prejudicial to Kingdoms as to private families ; and ... the expence of foreign Commodities, especially foreign Manufactures is the worst expence a Nation can be inclinable to, and ought to be prevented as much as possible, but ... nothing hath or will incline this or any other Nation more to Thriftiness and good Husbandry,... than abatement of Interest.¹⁰³

Regarding labourers, he adopts a strongly moralizing discourse underpinned by both the macroeconomic and social costs (labour disincentive) of poor relief. Despite having an opposing premise, advocates of free trade reveal the same tension. The political economist Charles Davenant, for example, observes that England has become richer and more prosperous thanks to its imitation and substitution of foreign goods imports but opposes the Mandevillian approach in the luxury debate, emphasizing that he is ‘very far from adhering to the old Notion, that Luxury and some Excess, may be profitable.’ It is interesting to note that one might have expected here the ‘new’ rather than the ‘old’ notion, but Davenant, like many of his contemporaries, was aware of the long pre-Mandevillian intellectual filiation of seventeenth-century revaluation of luxury. He concedes nevertheless that ‘it is not impossible, but that our Industry would be less active if it were not awaken’d and incited by some

irregular Appetites ... A rich Soil is apt to make a People lazy, and peradventure we should not be so stirring and inventive, but for our Inclination to Foreign Vanities.’¹⁰⁴ The industriousness of the nation must be matched by the painful application of labourers. In another pamphlet published a year later Davenant refers to Gregory King’s work to argue in favour of laws that

may be arm’d against voluntary Idleness, so as to prevent it, and a way may probably be found out to set those to Work who are desirous to support themselves by their own Labour... for if the Industry of not half the People maintains in some degree the other part ... to what pitch of Wealth and Greatness might we not be brought ... if all the Members of the Body Politick were render’d useful to it.¹⁰⁵

During and after the 1720s the relationship between these two discourses was inverted, as values of (self)-improvement, emulation and reasonable consumption became the dominant elements in the industriousness discourse. This is what de Vries understands (in a rather reductive way) as *the* industriousness discourse, i.e. combining the toleration of luxury and moral education as keys to success for both individuals and nations. To be fair, the increasing prevalence of these ideas in print - measurable by the steady increase in the relative occurrences of these words in the century after 1720 (Fig. 2) in very large numbers of books produced after 1701 (see Fig. 3) - shows a real and statistically significant quantitative diffusion in these years. It will not come as a surprise, however, that, as in the period before the 1720s, industriousness discourses were mostly aimed at an educated elite, whereas after this date they were largely used by publicists such as Defoe, Hogarth and Franklin, who were all prone to encouraging a more economically engaged social morality.¹⁰⁶ Hogarth’s series of paintings and prints such as *A Harlot's Progress* (1731), *A Rake's Progress* (1735) and *Industry and Idleness* (1747) are telling example of this new combination focusing on popular attitudes to luxury and industriousness.

As rightly noted by de Vries, Defoe seems to be even more extreme than Mandeville by celebrating the aggregated economic effects of ‘the exorbitances [not only of the wealthy but] of the poor and the middling sort,’ too.¹⁰⁷ In *The Complete English Tradesman* Defoe seems to start by accepting the basis of the Mandevillian analysis, stating that ‘reforming our vices would ruin the nation’. On an individual scale, however, like many English critics of Mandeville, such as Shaftesbury, Berkeley and Hutcheson, Defoe believes in the possible existence of a ‘honest hive’ based on the restoration of the lost balance in ‘man’s natural ‘oeconomy’’, that is to say on the education and restriction of excessive passions.¹⁰⁸ Defoe associates industriousness (morality) and luxury (hedonism) as the two inseparable components of active social morality. Thus, although ‘he that loves pleasure shall be a poor man’ for ‘business languishes while the tradesman is absent’,¹⁰⁹ the true virtue for an industrious individual is not rejecting pleasure-seeking activities and consumption altogether but achieving the right balance between the time and place for religion, leisure, bodily necessities and business. Hence Defoe criticizes both shopkeepers ‘with their long wiggs and swords rather than with aprons on’ and those ‘sermon-hunters’ who neglect their business.¹¹⁰ ‘I knew once a zealous, pious, religious tradesman, who would almost shut up his shop every day about nine or ten o’clock to call all his family together to prayers... [he] wounds his family by making his prayer interfere with his trade... the end of which was, the poor good man deceiv’d himself, and lest his business.’ William Hogarth’s *Harlot’s Progress* and *Rake’s Progress* both argued in favour of a similar notion of honest consumption as opposed to covetousness, avarice, luxury and fashion.¹¹¹ Franklin summarized this new take on industriousness by asking whether ‘to a certain Man, idle Diversions have nothing in them that is tempting, and therefore he never relaxes his Application to Business for their Sake; is he not an Industrious Man? Or has he not the Virtue of Industry?’¹¹²

As the quantitative analysis seems to indicate, Franklin *et alii* are indeed the real heroes of this story as they coincide with the heyday (i.e. the maximal diffusion) of the industriousness discourse between the 1720s and the 1810s. A rapid overview of the words most frequently associated (or, more accurately, correlated) to ‘industrious’ between 1700 and 1899 corroborates this point too. Out of twenty, ten are related to economic improvement, six to thrift and four to idleness, whereas over the two preceding centuries out of the forty most frequent collocates, seventeen indicate a moral quality, sixteen hard work, two are related to the notion of betterment and only one to idleness. (See Tables 2.1 and 2.2 below.) Despite this apparent unanimity, one should not be dazzled by the quasi feverish devotion to late eighteenth-century discourses about industriousness; the emphasis placed by historians and commentators upon industriousness also derives from its simultaneous consecration as a cliché of social sciences’ writing. An analysis of the data available through the Open Library (Fig. 6) shows that from the late 1790s onwards the relative frequency of the industrious discourse became almost five times higher in books classified by the Open Library as belonging to the ‘social sciences’ than in other British publications, even educational and (unsurprisingly) religious literature.¹¹³ The invention and perpetuation of an academic ‘industriousness discourse,’ which progressively came to dominate previous meanings, was thus certainly the result of the increasing necessity to explain contemporary economic and social transformations that a century later would be called Industrial Revolution.

Table 2.1 Top 40 (meaningful) collocates of ‘industrious’ terms in the EEBO database

Collocation coefficients (log-likelihood) between ‘industrious’ terms and the following words:

diligent	2585.92	Skilful	311.085
laborious	1818.619	men	290.37
painful	1378.914	faithful	287.961
active	1327.68	endeavour	283.334
Ingenious	1264.023	Zealous	273.24
careful	1001.604	promote	266.95
studious	925.121	witty	259.54
Vigilant	924.653	indefatigably	243.961
Learned	744.625	watchful	243.564
honest	633.636	subtle	223.412
labour	616.844	concealed	221.922
Bees	544.313	Husbandman	216.367
labours	470.34	judicious	214.594
endeavours	410.995	sedulous	213.741
frugal	351.26	study	213.664
diligence	346.085	improve	195.625
provident	343.487	endeavoured	194.991
laboured	336.97	ingenuous	177.254
care	330.432	pains	176.227

Note: Collocations determined through the *CQPweb* interface. For reference see A. Hardie, ‘CQPweb - combining power, flexibility and usability in a corpus analysis tool’, *International Journal of Corpus Linguistics*, 17 (2012), pp. 380-409

Table 2.2 Top 20 (meaningful) words correlated to ‘industrious’ in the English 2009 Ngram database 1700-1899

Correlation coefficients between ‘industrious’ and the following words:

industry	0.7817	inconvenience	0.5952
flourishing	0.6862	afford	0.5952
expense	0.6484	populous	0.5919
luxury	0.6472	flourish	0.5860
proportioned	0.6301	improvements	0.5848
improving	0.6145	scarcity	0.5834
indolence	0.6031	commerce	0.5827
manners	0.6023	advantages	0.5799
sterling	0.6002	idle	0.5789
improved	0.5976	extravagance	0.5773

Note: Correlations determined through the correlation tool available at <http://correlation.mine.nu/Correlation/> developed in SEASR/Meandre by L. Auvil and B. Capitanu, modeled on prototypes developed by T. Underwood and R. Heuser.

After 1810, moreover, the rate of circulation started showing the first signs of relative decline as, although the number of books using the word remained almost steady (Figs. 3 and 6), the total number of publications rocketed, hence progressively lowering the frequency of the term (Fig. 4). Thus, it is fair to conclude that ‘industrious’ was predominantly an eighteenth-century vocable. The opposite is true for ‘industriousness’: although the frequency of words derived from ‘industrious’ was divided by 15 between 1830 and 2000 within an ever-increasing number of publications, the frequency of ‘industriousness’ (Fig. 3) was multiplied by twenty between 1900 and 1990. This inverted relationship between the fates of the two words further illustrate the spurt of academic interest in the conceptualization of ‘industriousness’ and its relationship to the economic transformations of the previous two centuries. This also explains the crystallization of the meaning of ‘industrious’ (i.e. the reduction of the polysemy and multiplicity of the many industrious discourses to the unequivocal singularity of *the* industrious discourse) during the latter period. This is illustrated by the progressive convergence between the usages of ‘industriousness’ and ‘idleness’ after 1820 as can be observed in fig. 4.1.

To conclude, the causation between industrious discourses and changes in economic behaviours does not appear as obvious as de Vries and McCloskey would like to portray it. The chronology tells a rather different story: first, these discourses existed long before the advent of modern consumerism and, second, their diffusion did not become really significant until much later, when the Industrial Revolution was already happening. Furthermore, stemming from this obsessive ‘treasure hunt’ for the origins of the Industrial Revolution, this review has shown that the analyses of both authors were marred by a mistaken conception of continuity in discourses from the seventeenth to the nineteenth centuries. I hope that it is sufficiently clear now that this cannot, however, replace a more attentive study of the values and norms diffused through this heterogeneous body of texts. In brief there was not before the

very end of the eighteenth century a single discourse about industriousness, but many of them diverging and competing for the attention of different audiences.

It is true that these different types of discussion of industriousness often crystallized around debates regarding the valorisation of increased luxury consumption, especially in the mid eighteenth-century, but I hope to have shown that this association was neither an inevitable development of earlier conceptions of industriousness - especially in the field of political economy, nor was it really dominant in late eighteenth-century uses of the term. Older versions of 'industriousness' clearly remained extremely influential throughout the century, and the mythical syncretism between economic theory and 'industrious' discourse posited by the likes of de Vries was, in fact, much more a phenomenon of the late nineteenth and twentieth centuries, which appeared with the needs to theorize the origins of industrialisation.

Yet, as clearly shown by Muldrew, the Interregnum was a key moment in the unification, or rather the synthesis, of this discourse as it laid the intellectual foundations of a paradigm of economic rationality embodied in and channelled through official institutions and economic policies. This intellectual model has unfortunately become the unquestioned premiss of many economists' and economic historians' accounts of an industriousness shift accompanying the advent of (economic) modernity. I hope the chronology sketched in this article will provide a strong rejoinder to this misleading anachronism.

Finally, although previous generations of scholars – who had mostly based their accounts of the advent of modernity on economic (Marxian), or psychological and religious (Weberian) determinisms¹¹⁴ – could make do without a model of social diffusion, this article illustrates the problem encountered by all new putative explanations of changing patterns of consumption or industriousness that aim both at stressing individual agency and rejecting neoclassic economic rationality. Whereas the Marxian determinism argues that cultural shifts

only reflect changes in modes of production or, by extension, real prices series, and the Weberian posits an immediate behavioural transformation linked to self-fulfilling individual drives - e.g. Calvinism is, for Weber, inherently linked to the development of a capitalistic ethos, and once this correlation is established the problem is relegated to the safer shore of religious sociology, everything falling in-between now has to come up with its own answer to the thorny question of the diffusion and social distribution of these new economic values.¹¹⁵ And, as such simple overarching methodological frameworks are just not available anymore in the historical toolbox, the authors, whose works have been examined in this article, will not be able to avoid clarifying the theoretical model of cultural and social diffusion (i.e. both of ideas and goods) that underpins their narrative

Trinity College, Cambridge CB2 1TQ adl38@cam.ac.uk

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¹ James Cranford, *Haereseo-machia: or, The mischiefe which heresies doe, and the means to prevent it* (London, 1646), p.28

² Thomas Heywood, *The Rape of Lucrece* (London, 1608), p.345

³ B. Franklin and D. Hall, *Advice to a Young Tradesman, Written by an Old One* (Philadelphia, 1748)

⁴ P. Slack, 'Material progress and the challenge of affluence in seventeenth-century England', *The Economic History Review*, 62 (2009), p.592

⁵ J. de Vries, *The industrious revolution : consumer behavior and the household economy, 1650 to the present* (Cambridge, 2008); D. N. McCloskey, *Bourgeois dignity: why economics can't explain the modern world* (Chicago, 2010); C. Muldrew, *Food, energy and the creation of industriousness: work and material culture in agrarian England, 1550-1780* (Cambridge, 2011)

⁶ Muldrew looks at the "creation of industriousness" through the magnifying glass of early reflections on poor relief in England during the Interregnum.

⁷ J. de Vries, 'Between purchasing power and the world of goods: understanding the household economy in early modern Europe', in John Brewer and Roy Porter, eds., *Consumption and the World of Goods* (London, 1993), pp. 85-132; J. de Vries, 'The Industrial Revolution and the Industrious Revolution', *The Journal of Economic History*, 54 (1994), pp.249-270; J. de Vries, 'Luxury and Calvinism/ Luxury and Capitalism: Supply and Demand for Luxury Goods in the Seventeenth-Century Dutch Republic', *The Journal of the Walters Art Gallery* 57 (1999), 73-86; de Vries, *The industrious revolution*.

⁸ This is obviously a mere fiction as the relative price of these goods simultaneously dropped thanks to a combination of import substitution, technical innovations and increased productivity of labour. Even non-manufactured goods followed this trend. Over the course of the seventeenth century, for example, the price of sugar decreased by half and again between during the first half of the eighteenth century by another third. Then it furnished as many calories per penny as did meat or beer. The increase in consumption was partly an effect of price reduction. See C. Shamma, *The pre-industrial consumer in England and America* (Oxford, 1990). It is also interesting to note that the "industriousness discourse" examined in this article is predominantly masculine. Terms that are characteristically feminine are rarely associated to the idea of industriousness. In the list of the most frequent collocates of "industrious" from the EEBO database "woman" and "women", for example, only appear in 478th and 915th positions, whereas "man" and "husbandman" stand respectively at the 22nd and 32nd places. (See table 2.1 below)

⁹ H.-J. Voth has shown that working hours increased after 1750 but without real change in consumption per capita and G. Clark and Y. Van Der Werf have adopted a more radical (but less interesting) approach discarding any possible increase in working hours arguing that people had always toiled for many hours. See H.-J. Voth, *Time and work in England 1750-1830* (Oxford, 2000), and G. Clark and Y. Van Der Werf, 'Work in Progress? The Industrious Revolution', *Journal of Economic History*, 58 (1998), pp. 830- 843. More recently, by adopting the opposite strategy – that is, calculating how much work would be necessary to buy a set of goods – Allen and Weisdorf have noted two potential increases in workload (between 1500 and 1616 and after 1750). Thus, if people worked only as long as they could to afford a minimal basket between 1600 and 1750 rural wages show that most families would have had to increase their workload just to barely survive whereas after 1750 qualified urban craftsmen had income in excess available either for consumption or for compensating a relative withdrawal of their wives and children from the labour market. See R. C. Allen and J. L. Weisdorf, 'Was there an "industrious revolution" before the industrial revolution? An empirical exercise for England, c.1300-1830', *The Economic History Review*, 64 (2011), pp.715-29.

¹⁰ The founding fathers of this sociological model are obviously Gabriel Tarde and Thorstein Veblen. The former diagnosed what he called the “épidémie de luxe” diffused through imitation and emulation. See G. Tarde, *Les lois de l'imitation* (Paris, 1890), V, 2, n.2 and the commentaries by B. Latour and V. A. Lépinay, *L'économie, science des intérêts passionnés. Introduction à l'anthropologie économique de Gabriel Tarde* (Paris, 2008), and A. Barry and N. Thrift, ‘Gabriel Tarde: imitation, invention and economics’, *Economy and Society*, 36 (2007), pp.518-9. In the Anglophone world Veblen has been the main contributor to the consumption literature providing an alternative to neoclassic economics by showing that consumption choices were socially determined rather than rational economic maximizations. See T. Veblen, *The Theory of the Leisure Class: an economic study in the evolution of institutions* (New York, 1899).

¹¹ De Vries, *The industrious revolution*, pp. 43 and 52

¹² See R. W. Bologh, *Dialectical phenomenology: Marx's method* (London, 1979), pp.76-9, and on Marx an the dual normative conception of needs (good and bad needs) and their historical development see L. Hamilton, *The political philosophy of needs* (Cambridge, 2003). In a famous passage in *The Grundrisse*, Notebook III, 29 November - c. mid-December 1857, ch.6, Marx explains that: ‘The great historic [destiny] of capital ... is fulfilled as soon as, on one side, there has been such a development of needs that surplus labour above and beyond necessity has itself become a general need arising out of individual needs themselves—and, on the other side, when the severe discipline of capital, acting on succeeding generations, has developed general industriousness as the general property of the new species - and, finally, when the development of the productive powers of labour, which capital incessantly whips onward with its unlimited mania for wealth, and of the sole conditions in which this mania can be realized, have flourished to the stage where the possession and preservation of general wealth require a lesser labour time of society as a whole, and where the labouring society relates scientifically to the process of its progressive reproduction, its reproduction in a constantly greater abundance; hence where labour in which a human being does what a thing could do has ceased. ... The relation of domination is the only thing which is reproduced on this basis, for which wealth itself has value only as gratification, not as wealth itself, and which can therefore never create general industriousness.’

¹³ De Vries, *The industrious revolution*, p.44

¹⁴ Ibid., p.52

¹⁵ Since Tawney the main reproach formulated against Weber's thesis by historians has been that it is purely subjective. See for example H. M. Robertson, *Aspects of the rise of economic individualism: a criticism of Max Weber and his school* (Cambridge, 1933); R. H. Tawney, *Religion and the rise of capitalism: a historical study*

(London, 1926); M. H. MacKinnon, 'Part I: Calvinism and the infallible assurance of grace: the Weber thesis reconsidered' and 'Part II: Weber's exploration of Calvinism: the undiscovered provenance of capitalism', *British Journal of Sociology*, 39 (1988), pp.143-210. See also P. C. Gordon Walker, 'Capitalism and the Reformation', *The Economic History Review*, 8 (1937), pp.1-19 for more on the early controversy that followed Weber's essay.

¹⁶ De Vries, *The industrious revolution*, p.52

¹⁷ McCloskey, *Bourgeois dignity*, p.12

¹⁸ For a good example of what a cultural analysis of the diffusion of desire means, see L. L. Peck, *Consuming splendor: society and culture in seventeenth-century England* (Cambridge, 2005), ch.3. Peck mainly focuses on the diffusion of desires through visual contact with imports, prints and travels. The best analysis of seventeenth-century redefinition of *honestas* in civic communities is P. Withington, *The politics of commonwealth: citizens and freemen in early modern England* (Cambridge, 2005).

¹⁹ McCloskey, *Bourgeois dignity*, pp.16-17

²⁰ *Ibid.*, p.23

²¹ The distinction almost becomes preposterous when she gives the example 'of the Jews, liberated legally during the eighteenth and nineteenth centuries but not accorded dignity - with the dismal result of Russian pogroms and Viennese anti-Semitic politics and the Final Solution.' *Ibid.*, pp.10-1

²² L. Greenfeld, *The spirit of capitalism: nationalism and economic growth*, (Cambridge MA, 2001), p.96

²³ McCloskey, *Bourgeois dignity*, pp.29 and 339-45

²⁴ See W. J. Ashworth, 'The Ghost of Rostow: Science, Culture and the British Industrial Revolution', *History of science*, 153 (2008), pp.249-74.

²⁵ Together with these economic historians a variety of early-modernists have also been interested in finding these proto-liberal pre-Smithian economic thought: see in particular J. O. Appleby, *Economic thought and ideology in seventeenth-century England* (Princeton 1978). For a brilliant analysis of the political context of these teleological analyses, see P. Slack, 'The Politics of Consumption and England's Happiness in the Later Seventeenth Century', *The English Historical Review*, 497 (2007), pp.609-31.

²⁶ McCloskey, *Bourgeois dignity*, p.1

²⁷ It is interesting to note that although Mokyr is more interested in technical inventiveness than in proper industriousness, his concept of an "enlightened economy" exposes him to similar methodological caveats. Yet, despite his neoclassical rationality framework, the reductive scope of his Enlightenment (which seems to include

neither intellectual nor religious controversies) and the limited social analysis of the group of innovators and “tweakers” he identifies as crucial, Mokyr stands on a much better and firmer footing than his fellow economic historians. The main difference is that he does not assume an immediate diffusion of these values in society. Especially, he believes in the role of institutions as products of beliefs or, as he also put it, ideology in transforming individual behaviours. Thus, he looks at the mediation of these institutions in the constitution of technical literacy and the development of human capital required for the constitution of an “enlightened” economy. For one of the latest example see M. Kelly, J. Mokyr, and C. Ó Gráda, ‘Precocious Albion: a New Interpretation of the British Industrial Revolution’, *UCD centre for economic research, Working Papers Series*, 13/11 (2013).

²⁸ McCloskey, *Bourgeois dignity*, p.13 agrees: ‘The elite took a century or more after the age of Shakespeare to begin speaking of commercial creativity as OK, acceptable, not-to-be-sneered-at, as in all the many works of Daniel Defoe, and then the essays and plays of Addison and Steel, and then the “bourgeois tragedies” on the stages of England and France and Germany, and then above all in the modern European novel.’

²⁹ J.-B. Michel, Y. K. Shen, A. P. Aiden, et al., ‘Quantitative Analysis of Culture Using Millions of Digitized Books’, *Science*, 331 (2011), pp.176-82.

³⁰ See the Supporting Online Material for a detailed description of their work.

³¹ The very blurry definition of what a book is in the early modern period reduces the significance of this sort of figure, but it gives a good idea of the size of the sample.

³² The analysis of this database was made possible thanks to the Bookworm software developed by B. Janitsch and M. Camacho at the Harvard Cultural Observatory.

³³ The EEBO database includes books from the English Short Title Catalogue I and II (based on the Pollard & Redgrave and Wing short title catalogues) and the Thomason Tracts and the Early English Books Tract Supplement. Together, they amount to more than 125,000 books published between 1475 and 1700. The Text Creation Partnership (TCP) subset represents roughly 40 per cent of all these records. For details about the TCP project, see www.textcreationpartnership.org/tcp-eebo. All these records have been transcribed by hand so they should be (in principle) immune to OCR-related errors. It is not, however, a perfect sample; the order in which these texts are transcribed depends on requests by scholars and librarians from participating institutions around the world. Thus, these 50,000 might not be representative of the full dataset. The figures given in this paper are based on the last version of the dataset that was released in November 2012.

³⁴ McKitterick shows, for example, that until the 1640s manuscripts and books were not listed separately in most

library catalogues. See D. McKitterick, *Print, Manuscript and the Search for Order, 1450–1830* (Cambridge, 2003).

³⁵ D. McKitterick, 'Introduction' in D. McKitterick, ed., *Cambridge History of the Book in Britain, 1830-1914*, (Cambridge, 2009), p.50

³⁶ P. Mandler, 'The Problem with Cultural History', *Cultural and Social History*, 1 (2004), p.103

³⁷ This is nothing new. As we will see below, previous quantitative textual analyses have looked at this corpus and even social and economic historians like to count words. It is, for example, one of Muldrew's argument (among many more detailed qualitative analyses). See Muldrew, *Food, energy and the creation of industriousness*, pp.303-6.

³⁸ Thomas Nashe, in his last published work, describes the industriousness of Yarmouth fishermen 'in winning the treasure of fish out of those profundities.' T. Nashe, *Lenten Stuffe* (London, 1599), p.18 D. Erasmus, *De contemptu mundi, The dispisyng of the worlde, compiled in Latyn by Erasmus Rot. and translated in to Englyshe by Thomas Paynell* (London, 1533).

³⁹ R. Cawdrey, *A table alphabeticall, conteyning and teaching the true writing, and understanding of hard usuall English wordes, borrowed from the Hebrew, Greek, Latine, or French etc with the interpretation thereof by plaine English words, gathered for the benefit & helpe of ladies, gentlewomen, or any other unskilfull persons, whereby they may the more easilie and better understand many hard English wordes, which they shall heare or read in scriptures, sermons, or elsewhere, and also be made able to use the same aptly themselves* (London, 1604) and T. Blount, *Glossographia, or, A dictionary interpreting all such hard words, of whatsoever language, now used in our refined English tongue* (London, 1656)

⁴⁰ The number of books (in absolute value) represented in Fig.3 corroborates this interpretation.

⁴¹ This follows the argument in Slack, 'Material progress and the challenge of affluence in seventeenth-century England' that early English 'political economy' made material improvement palatable.

⁴² These verses from King James 1611 were quoted many times as, for example, in the *Treatise of the Covenant of Grace* posthumously published in 1645 by J. Ball, (p.186). See also John Healey's translation of Augustine's *City of God*: 'The industrious and the sloathful have both one desire of honor, glory and sovereignty. But the first (saith he) goeth the true way to worke, the later by craft & false means, because he hath not the true course. The true, are these, to come to honor by vertue, not by ambition.' Augustine, *St. Augustine of the Citie of God: with the learned Commentarie of Jo. Lod. Vives. Englished by J. H.* (London, 1610), 12, p.215.

⁴³ See, for example, John Wheeler, Secretary of the Merchants Adventurers, *A treatise of commerce: Wherein are shewed the commodities arising by a well ordered and ruled trade, such as that of the Societie of Merchants Aduenturers is proued to be: written principally for the better information of those who doubt of the necessarinesse of the said societie in the state of the realme of England* (London 1601), p.22. He explains the benefits of trade ‘by all which Commodities, a number of labouring men are set on worke, and gaine much money, besides that which the Merchants gaineth, which is no small matter.’

⁴⁴ Hesiod, Aristophanes and Plato had already used the comparison, but it is Aristotle who theorized its political dimension: ‘Those which have a common employment are called social, but that is not the case with all gregarious animals. Man, and the bee, the wasp, and the ant, and the stork belong to this class. Some of these obey a leader, others are anarchical; the stork and the bee are of the former class, the ant and many others belong to the latter.’ Aristotle, *History of animals*, trans. R. Cresswell (London, 1862), I, p.4. The most beautiful evocation is probably in *Aeneid*, I, 423-36, when Virgil describes the eager Tyrians busy building walls: ‘Like bees in spring across the blossoming land, Busy beneath the sun, leading their offspring, Full grown now, from the hive, or loading cells Until they swell with honey and sweet nectar, Or taking shipments in, or lining up To guard the fodder from the lazy drones; The teeming work breathes thyme and fragrant honey.’ Virgil, *Aeneid*, trans. S. Ruden, (New Haven, 2008), p.13. The image became a staple of early seventeenth-century sermons. See, for example, T. Walkington, *The optick glasse of hvmors: or The touchstone of a golden temperature, or The philosophers stone to make a golden temper. Wherein the foure complections sanguine, cholericke, phligmaticke, melancholicke are succinctly painted forth and their externall intimates laide open to the purblind eye of ignorance it selfe, by which euery one may iudge, of what complection he is, and answerably learne what is most sutable to his nature* (London, 1607), p.41. For the use of the comparison by Christian writers see J. W. Johnson, ‘That Neo-Classical Bee’, *Journal of the History of Ideas*, 22 (1961), pp.262-66. Danielle Allen has recently argued against Johnson periodization, but her evidences - mostly from beekeeping treatises - is far from conclusive. See D. Allen, ‘Burning the *Fable of the Bees*: the incendiary authority of nature’, in L. Daston and F. Vidal, eds., *The Moral authority of nature* (Chicago, 2004), p.75. Ants have a similarly ancient pedigree reflected by Prov. 6.6, which in the King James translation reads ‘Go to the ant, thou sluggard; consider her ways, and be wise.’

⁴⁵ The first line is: ‘Unto the industrious nature of Bees nothing is more odious than sloth and idlenesse.’ It can also be found in a pamphlet written by playwright Tomas Dekker in 1603, where he mentions the ‘prosperous hives, and rare induftrious Swarmes’ as a metaphor for the union of the English and Scottish crowns with the

coronation of James I. See Thomas Dekker, *The non-dramatic works of Thomas Dekker*, vol.1 (London, 1884), p.98. To be fair, the image was probably quite directly influenced by the Archbishop of Canterbury's famous discourse on honey-bees in Shakespeare's *Henry V*, (I, 2, 1.329-66). Canterbury gives the king a lesson of political science telling him that he should not fear dissension as long as, like obedient honey-bees, he fulfils his role in society, which, in this case, obviously means going to war against the French:

Therefore doth heaven divide/The state of man in divers functions,/Setting endeavour in continual motion; /To which is fixed, as an aim or butt,/Obedience: for so work the honey-bees,/Creatures that by a rule in nature teach/The act of order to a peopled kingdom./They have a king and officers of sorts;/Where some, like magistrates, correct at home,/Others, like merchants, venture trade abroad,/Others, like soldiers, armed in their stings,/Make boot upon the summer's velvet buds,/Which pillage they with merry march bring home/To the tent-royal of their emperor;/Who, busied in his majesty, surveys/The singing masons building roofs of gold,/The civil citizens kneading up the honey,/The poor mechanic porters crowding in/Their heavy burdens at his narrow gate,/The sad-eyed justice, with his surly hum,/Delivering o'er to executors pale/The lazy yawning drone.

Edmond Malone argued that Shakespeare had himself in mind a passage on the commonwealth of bees from J. Lyly, *Euphues: the anatomy of wit and, Euphues and his England*, first edn. 1580, (Manchester, 2003), pp.187-95.

⁴⁶ D. Digges, *The defence of trade: in a letter to Sir Thomas Smith Gover from one of that Societie* (London, 1615), p.2

⁴⁷ *Ibid.*, p.41

⁴⁸ T. Mun, *A Discourse of Trade From England unto the East-Indies answering to diverse objections which are usually made against the same* (London, 1621), p.6. Mun argues in favour of the balance of trade rather than bullion exports. Mun was also an apologist of the East India Company like Henry Robinson, Josiah Child, Charles Davenant and Edward Misselden.

⁴⁹ E. Misselden, *The circle of commerce, or, The ballance of trade, in defence of free trade: opposed to Malynes little fish and his great whale, and poized against them in the scale: Wherein also, exchanges in generall are considered: and therein the whole trade of this kingdome with forraigne countries, is digested into a ballance of trade, for the benefite of the publike. Necessary for the present and future times* (London, 1623), pp.132-3

⁵⁰ T. Mun, *England's Treasure by Forraign Trade. Or, The Ballance of our Forraign Trade is the Rule of our Treasure* (London, 1630s), p.125

⁵¹ This is really the trope of travel writing in the Low Countries in these years. It started in the economic literature of the 1610s, through to Malynes, Mun and Misselden in the 1620s and becomes a general image in the 1640s. See J. Howell, *Instructions for forreine travell*, first edn. 1642, (London, 1903), p.61, T. Edwards, *Reasons against the independant government of particular congregations as also against the toleration of such churches to be erected in this kingdome together with an answer to such reasons as are commonly alledged for such a toleration presented in all humility to the Honourable House of Commons now assembled in Parliament* (London, 1641), p.30, T. Gainsford, *The glory of England, or A true description of many excellent prerogatiues and remarkeable blessings, whereby she triumpheth ouer all the nations of the world with a iustifiable comparison betweene the eminent kingdomes of the earth, and herselfe plainly manifesting the defects of them all in regard of her sufficiencie and fulnesse of happinesse* (London, 1618), a very popular pamphlet with many reprints throughout the 1620s, G. Malynes, *Consuetudo, vel, Lex mercatoria, or the antient law-merchant* (London, 1629), pp.240, 244, 334, J. Barclay, *The mirror of minds: Icon animorum*, trans. T. May, (London 1631), p.129. The early accounts from Virginia often also use the term when comparing natives to European national traits. In his *Description of New England* in 1616 John Smith asks: ‘who doth not know that the poor Hollanders, chiefly by fishing at a great charge and labor in all weathers in the open sea, are made a people so hardy and industrious? And by the vending this poor commodity to the Easterlings for as mean, which is wood, flax, pitch, tar, rosin, cordage, and such like, which they exchange again to the French, Spaniards, Portuguese, and English, etc., for what they want, are made so mighty, strong, and rich as no state but Venice, of twice their magnitude, is so well furnished with so many fair cities, goodly towns, strong fortresses, and that abundance of shipping and all sorts of merchandise, as well as gold, silver, pearls, diamonds, precious stones, silks, velvets, and cloth of gold, as fish, pitch, wood, or such gross commodities.’ J. Smith, ‘A Description of New England (1616): An Online Electronic Text Edition’, *Electronic Texts in American Studies*, 4, p.25

⁵² R. Burton, *The anatomy of melancholy*, first edn. 1621, (Oxford 1638), p.53

⁵³ Malynes, *Consuetudo, vel, Lex mercatoria*, p.363

⁵⁴ J. A. Herdt, *Putting on virtue: the legacy of the splendid vices* (Chicago, 2008), pp.221-2. See also Slack, ‘Material progress and the challenge of affluence in seventeenth-century England’, p.591

⁵⁵ W. M. Halliwell-Phillipps, *The man in the moone, telling strange fortunes, or, The English fortune-teller*, 1609, especially the “prodigall” and “serving-man” chapters.

⁵⁶ R. L. Greaves, *Society and religion in Elizabethan England* (Minneapolis, 1981), p.383

⁵⁷ H. Montagu, *Contemplatio Mortis & Immortalitatis*, first edn. 1631, (London, 1638), p.146. See also B.

Quintrell, 'Montagu, Henry, first earl of Manchester (c.1564–1642)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, Jan 2008 [<http://www.oxforddnb.com/view/article/19020>]

⁵⁸ J. Dyke, 'Sermon of Buying and Keeping the Truth' in D. Dyke, ed., *Divers select sermons on severall text: 1. Of quenching the spirit. I Thessalon. 5.16. 2. Of the sinners suite for pardon. 2 Sam. 24.10. 3. Of eating and digesting the Word. Ier. 15.16. 4. Of buying and keeping the truth. Prov. 23.23. Preached by that reverend and faithfull minister of the word, Ier. Dyke, late preacher of Epping in Essex. Finished by his owne pen in his life time, and now published by his sonne Dan. Dyke Master of Arts*, (London 1640), pp.305-393.

⁵⁹ See the 'Introduction' in M. Berg and E. Eger, eds., *Luxury in the eighteenth century: debates, desires and delectable goods*, (Basingstoke, 2002).

⁶⁰ P. Withington, *Society in early modern England: the vernacular origins of some powerful ideas* (Cambridge, 2010), pp.80-7

⁶¹ The first "prentice", Godling, was industrious, while the other, Quicksilver, was characterized by his prodigality and their fate were radically opposed. See C. J. Sommerville, *The discovery of childhood in Puritan England*, (Athens GA, 1992), p.81 and cf. T. Heywood, *The Four Prentices of London* (London, 1615).

⁶² Sommerville, *The discovery of childhood in Puritan England*, p.89

⁶³ Sommerville also mentions S. Peck, *The best way to mend the world, and to prevent the growth of popery by perswading the rising generation to an early and serious practice of piety: with answers to the principal cavils of Satan and his agents against it, &c. By Samuel Peck, minister of the word at Poplar* (London, 1680); J. Styrpe, *Lessons moral and Christian, for youth and old age in two sermons preach'd at Guildhall Chappel, London chiefly intended for the use of this city* (London, 1699); S. Brewster, *The Christian scholar: in rules and directions for children and youth sent to English schools. More especially design'd for the poor boys, taught and cloathed by charity, in the parish of St. Botolph Aldgate* (London, 1700); S. Patrick, *Book for beginners, or, A help to young communicants: that they may be fitted for the Holy communion, and receive it with profit* (London, 1679), and W. Smythies, *The benefit of early piety: recommended to all young persons, and particularly to those of the City of London* (London, 1684). From C. J. Sommerville, 'The Anti-Puritan Work Ethic', *Journal of British Studies*, 20 (1981), pp.70-81 We can also observe the consequences of this pragmatic and temporary relaxation in the Protestant economic morality in Anthony Horneck's sermons in the 1680s and 1690s.

⁶⁴ I. Hont, 'The early Enlightenment debate on commerce and luxury' in M. Goldie and R. Wokler, eds., *The Cambridge History of Eighteenth-Century Political Thought*, (Cambridge, 2006), p.389

⁶⁵ Idem, p.392. See also E. J. Hundert, *The Enlightenment's Fable: Bernard Mandeville and the Discovery of Society* (Cambridge, 1994), chapter 2.

⁶⁶ Hundert, *The Enlightenment's Fable*, p.111

⁶⁷ B. Mandeville, *The fable of the bees: or, Private vices, publick benefits*, 3rd edn. 1724, 'Remark K, On prodigality', pp. 105-6. Partially quoted in Hundert, *The Enlightenment's Fable*, p.206.

⁶⁸ As these time-series are non-stationary (both globally and in these sub-periods) I have tested them for cointegration. Whereas the two series are not cointegrated for the period 1820-1914 (the p-value obtained with the Augmented Dickey-Fuller test for the residual series is 0.36 and the test-statistic is bigger than the 10% critical value), for the period 1710-1820 the two series are cointegrated (the ADF p-value is 0.00 and the t-statistic is much smaller than the 1% critical value). In both cases the lag length was determined according to the Schwarz Info Criterion.

⁶⁹ McCloskey, p.27

⁷⁰ Muldrew, *Food, energy and the creation of industriousness*, p.300. J. Richards, *Rhetoric and courtliness in early modern literature*, (Cambridge, 2003), p.91

⁷¹ Muldrew, *Food, energy and the creation of industriousness*, p.304

⁷² H. Parker, *Of a free trade, a discourse seriously recommending to our nation the wonderfull benefits of trade, especially of a rightly governed and ordered trade: setting forth also most clearly the relative nature, degrees, and qualifications of libertie, which is ever to be enlarged, or restrained according to that good which it relates to as that is more or lesse ample* (London, 1648); W. Blith, *The English improver improved, or, The survey of husbandry surveyed: discovering the improvableness of all lands some to be under a double and treble, others under a five or six fould, and many under a tenn fould, yea, some under a twenty fould improvement* (London, 1649). In the preface to the 1652 edition he argues that 'the last though not the least [issue] is the raigne of many abominable Lusts, as Solth and Idleness, with their Daughters, Drunkenness, Gaming, Licentious liberty. Were not the greatest and best, and all men made to be usefull to the body? Why continue many men as members cut off from it, as if they were made to consume it, are neither usefull in their bodies, mindes, or purses to the common good?'. See also W. Petyt, 'Britannia Languens', in J. R. McCulloch, *A select collection of early English tracts on commerce, from the originals of Mun, Roberts, North, and others* (London, 1856), pp.275-505, and T. Papillon, *A treatise concerning the East India trade being a most profitable trade to the kingdom, and best secured and improved by a company and a joint-stock* (London, 1677).

⁷³ S. Fortrey, *England's Interest and Improvement Consisting in the Increase of the Store, and Trade of this Kingdom* (London, 1663) in J. R. McCulloch, *A select collection of early English tracts on commerce*, pp.211-50, and p.231.

⁷⁴ Petyt, "Britannia Languens", p.536

⁷⁵ J. Graunt, *Natural and political observations mentioned in a following index, and made upon the bills of mortality* (London, 1662, 2nd edn.), chap. 12, pp.33-5. Bishop Jeremy Taylor was a telling example of the strand of religious condemnation of poor relief on moral grounds. He argued that one should 'give no alms to vicious persons, if such alms will support their sin: as if they will continue in idleness; if they will not work, neither let them eat; or if they will spend it in drunkenness and wantonness: such persons, when they are reduced to very great want, must be relieved in such proportions as may not relieve their dying lust, but may refresh their faint or dying bodies.' R. Heber, ed., *The whole works of the Right Rev. Jeremy Taylor D.D. Lord Bishop of Down, Connor and Dromore* (London, 1839), vol.4, p.237. The political and economic pamphleteer Roger Coke was more sensitive to the negative psychological effects of indiscriminate poor relief: 'Man does not need nature but the Products of human industry and Art,' and 'where Man does not care for and govern, he should eat his bread by Labour and Industry' because 'it is a discouragement to all industrious and labouring people, when Lazy and idle people shall be maintained in their idleness from the fruits of their Labour and Industry.' R. Coke, *A Discourse on Trade* (London, 1690 1st edn. 1670), pp.14-5

⁷⁶ R. Allestree, *The whole duty of man, laid down in a plain and familiar way for the use of all, ... With Private devotions for several occasions*, 1704 (1st edn. 1658), p.31

⁷⁷ W. Blith, 'Epistle to the Husbandman, Farmer, or Tenant' in *The English improver, or, A new survey of husbandry: discovering to the kingdome that some land, both arrable and pasture, may be advanced double or treble, other land to a five or tenfold and some to a twentyfold improvement, yea some not now worth above one or two shillings per acree be made worth thirty or forty, if not more* (London, 1649). Obviously, many puritans had an opposing perception of human natural behaviour. The Cromwellian clergyman Thomas Hall preferred, for example, to quote Timothy 2, III, 2-4: 'For men shall be lovers of their own selves, covetous, boasters, proud, blasphemers, disobedient to parents, unthankful, unholy,/Without natural affection, trucebreakers, false accusers, incontinent, fierce, despisers of those that are good,/Traitors, heady, highminded, lovers of pleasures more than lovers of God', (King James Bible translation). Hall corresponds quite accurately to the Weberian archetype of Calvinist ethics; further, he argues that 'if the Lord by our industry, or by the death of Parents and Friends, shall enrich us, we may accept of them, and must improve them to the honour of that God, that gave them. As we have

better Wages, we must do more work.’ T. Hall, *A practical and polemical commentary: or, exposition upon the third and fourth chapters of the latter epistle of Saint Paul to Timothy, wherein the text is explained, some controversies discussed, sundry cases of conscience are cleared, many common places are succinctly handled, and divers useful, and seasonable observations raised* (London, 1658), pp.36-7. Although industriousness does not always concede grace, idleness certainly condemns, for ‘Vertue is a Lofty, Kindly, Laborious, Unconquerable thing; But pleasure Is a servile, sordid, idle, Weak thing; delighting in Stewes, and Alehouses, in Baths, and banquets.’ (p.122)

⁷⁸ J. Houghton, *England's great happiness, or, A dialogue between content and complaint : wherein is demonstrated that a great part of our complaints are causeless, and we have more wealth now than ever we had at any time before the restauration of His Sacred Majestie*, (London, 1677) reproduced in J. R. McCulloch, *A select collection of early English tracts on commerce*, pp. 251-74. Here, pp.261-2.

⁷⁹ De Vries, *The industrious revolution*, p.68

⁸⁰ Sommerville, ‘The Anti-Puritan Work Ethic’, p.73

⁸¹ Slack, *From reformation to improvement*, chs. 4-5

⁸² The two series are non-stationary (both globally and in the relevant subsets) and the computed p-value for the ADF test for the period 1640-1710 is nil whereas it rises to 0.30 after this date.

⁸³ W. Petty, ‘Englands guide to industry, or, Improvement of trade for the good of all people in general’ in E. Chamberlayne, *The fourth part of The present state of England [electronic resource] : relating to its trade and commerce within it self and with all countries traded to by the English, as it is found at this day established, giving a most exact account of the laws and customs of merchants relating to bills of exchange, policies of ensurance, freights, bottomery, wreck, averidge, contributions, customs, coyns, weights, measures, and all other matters relating to inland and marine affairs* (London, 1683), ch.6, p.82

⁸⁴ Although according to Christopher Berry this phenomenon only became manifest after 1650, Linda Peck has recently shown that it had been a dominant issue in treatises about the general interest since the time of the repeal of sumptuary laws by James I. See C. J. Berry, *The idea of luxury: a conceptual and historical investigation* (Cambridge 1994) and L.L. Peck, *Consuming splendor: society and culture in seventeenth-century England* (Cambridge, 2005).

⁸⁵ Fortrey, *England's interest*, reproduced in J. R. McCulloch, *A select collection of early English tracts on commerce*, pp. 211-50. Petyt also describes Englishmen as ‘ingenious, industrious, and willing to labour as any part of Mankind’. Petyt, “Britannia Languens”, p.313. It is a telling example of the institutionalization of English

industriousness in the light of eighteenth-century economic improvement. It is interesting to note that the expression was also commonly used to refer to inhabitants of the American colonies in the 1740s.

⁸⁶ J. A. Goldstone, 'The Demographic Revolution in England: a Re-examination', *Population Studies*, 40, 1 (1986), pp. 5-33; G. Clark, 'The Condition of the Working Class in England, 1209-2004', *Journal of Political Economy*, 113, (2005), pp.1307-40; G. Clark, 'The long march of history: Farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 60, 1 (2007), pp. 97-135; R. C. Allen, 'The Great Divergence in European Wages and Prices from the Middle Ages to the First World War', *Explorations in Economic History*, 38 (2001), 411-47; J. L. van Zanden, 'Early modern economic growth: a survey of the European Economy, 1500-1800' in M. Prak, ed., *Early Modern Capitalism* (London, 2001), pp. 69-87.

⁸⁷ S. N. Broadberry, B. M. Campbell, A. Klein, M. Overton and B. van Leeuwen, 'British economic growth, 1270-1870', Working paper, University of Kent, School of Economics Discussion Papers (Dec. 2011).

⁸⁸ A. Maddison, *The world economy: a millennial perspective* (Paris, 2001)

⁸⁹ Muldrew, *Food, energy and the creation of industriousness*, p.308; J. O. Appleby, *Economic thought and ideology*, pp.145-7 and J. Hatcher, 'Labour, Leisure and Economic Thought Before the Nineteenth Century', *Past and Present*, 160, 1 (1998), pp.67-71.

⁹⁰ E. A. Wrigley, *English population history from family reconstitution, 1580-1837* (Cambridge, 1997), p.614 - between 1656 and 1671.

⁹¹ Muldrew quotes North's *A Discourse of the Poor* in which he criticizes rising wages as favouring the leisure preference for workers and undermining industriousness. See Muldrew, *Food, energy and the creation of industriousness*, p.309 and R. North, *A Discourse of the Poor* (London, 1753 but written in the 1680s), pp.58-60.

⁹² Muldrew, *Food, energy and the creation of industriousness*, p.317. As noted by Sommerville 'some of these works, with their energetic rather than contemplative tone, proved to have considerable appeal. There were also the societies to reform public manners and morals, which depended primarily on lay activity. Popular journalism by Steele, Addison and Defoe, was enlisted in this general effort to improve the English character.' Sommerville, *The discovery of childhood*, p.81. See, for example, D. Defoe, *Giving Alms no Charity* (London, 1704) in which he describes workhouses as 'enriching one poor man to starve another'. Cf. J. Hatcher, 'Labour, Leisure and Economic Thought', notably p.66.

⁹³ J. Child, *A new discourse of trade, wherein is recommended several weighty points relating to companies of merchants. The act of navigation. Naturalization of strangers. And our woollen manufactures. The ballance of trade. And the nature of plantations, and their consequences in relation to the kingdom, are seriously discussed.*

And some proposals for erecting a court of merchants for determining controversies, relating to maritime affairs, and for a law for transferrance of bills of debts, are humbly offered (London, 1693).

⁹⁴ A telling example of this conflation can be found in the writings of the financier Sir Theodore Janssen. He argues against both following and importing French fashion and for the education of the poor to counter labourers' natural preference for leisure: 'when corn is cheap textile manufactures won't find spinners, when it is dear many people will work very hard.' See T. Janssen, *General maxims in trade, particularly applied to the commerce* (London, 1713), p.38.

⁹⁵ See N. Barbon, *A Discourse of Trade* (London, 1690), p.14, which de Vries particularly likes to quote: 'Desire implies Want : It is the Appetite of the Soul, and is as natural to the Soul, as Hunger to the Body.' However this metaphysical argument does not imply an equally universal theory of consumption. 'The Chief Causes that Promote Trade ... are Industry in the Poor, and Liberality in the Rich: Liberality, is the free Usage of all those things that are made by the Industry of the Poor, for the Use of the Body and Mind.' (p.31). Thus, the anthropological premise ('Man being Naturally Ambitious; the Living together, occasions Emulation, which is seen by Out-Vying one another in Apparel, Equipage, and Furniture of the House', [p.33]) has a twofold meaning according to the status of the person it applies to. Although Barbon opposes Mun and his predecessors on the necessity of sumptuary laws he agrees that because of this "natural ambition" the aspirations of the poor should be controlled while those of the rich should be encouraged. The same applies to contemporary authors like Dudley North, who claimed in his *Discourses upon Trade* (1691), that 'countries which have sumptuary laws are generally poor', (p.66) See also the fascinating argument put forward in Slack, 'The Politics of Consumption and England's Happiness in the Later Seventeenth Century'.

⁹⁶ G. Mackenzie, *The moral history of frugality, with its opposite vices, covetousness, niggardliness, and prodigality, luxury* (London, 1691). A similar claim has been made in D. Defoe, *The Complete English Tradesman, in familiar letters; directing him in all the several parts and progressions of trade ... Calculated for the instruction of our inland tradesmen; and especially of young beginners* (London, 1726-7), pp.125 ff. He argues that leisure suitable to an individual corresponds to his 'class, business and income.' Industrious tradesmen can therefore indulge in some leisurely activities which are not suitable for labourers. Defoe uses the common parable of an apprentice going to his ruin because of his taste for 'exotick luxuries' in letter 10, 'of extravagant and expensive living'.

⁹⁷ R. B. Shoemaker, 'Reforming the city; the reformation of manners campaign in London, 1690-1738', in L. Davison, T. Hitchcock, T. Keirn and R. B. Shoemaker, eds., *Stilling the Grumbling Hive, The Response to Social and Economic Problems in England, 1689-1750* (Stroud 1992), pp. 99-126.

⁹⁸ The Bristol merchant John Cary published a very popular protectionist pamphlet in 1695, reissued several times up to 1764, in which he urges English manufacturers to be more industrious and emulate the 'Progresses [that] have already been made step after step by our Manufacturers to imitate, and in many things to exceed all they have seen abroad.' J. Cary, *An essay on the state of England: in relation to its trade, for carrying on the present war against France* (Bristol, 1695), p.57. This is also what Slack identifies as a new 'confidence in progress' in the 1680s by the combination of writers such as Houghton and Barbon and 'Hartlib's ideology of improvement and happiness.' See Slack, 'The Politics of Consumption and England's Happiness', pp. 630-1.

⁹⁹ For a criticism of the way the Societies intended to curb prostitution see, for example, B. Mandeville (written under the pseudonym of Phil Porney), *A modest defence of publick stews: or, an essay upon whoring, as it is now practis'd in these kingdoms* (London, 1724). Incidentally, both discourses often reapplied the classic metaphor of the beehive to stress the necessity for a strict social division of consumption and industriousness. See, for example, H. Mackworth, *England's glory; or, The great improvement of trade in general, by a royal bank, or office of credit, to be erected in London: wherein many great advantages that will hereby accrue to the nation, to the Crown, and to the people, are mentioned; with answers to the objections that may be made against this bank* (London, 1694), pp.20-1, and obviously Mandeville's *Fable*.

¹⁰⁰ John Trenchard, *Cato's letters or essays on liberty civil and religious and other important subjects*, letter 87, 'Gold and Silver in a Country to be considered only as Commodities', (London, 4th edn. 1732), pp.176-84. Twenty-six years later Montesquieu will adapt this in a famous apophthegm in *De l'Esprit des Lois*: 'Les pays ne sont pas cultivés en raison de leur fertilité, mais en raison de leur liberté.'

¹⁰¹ Slack, *From reformation to improvement*, pp. 119-20

¹⁰² This is particularly conspicuous in M. Hale, *A discourse touching provision for the Poor* (London, 1683), pp.519-36. It corresponds almost word for word with what Muldrew argues. In general see Thomas Thirwall, ed., *The Works, moral and religious, of Sir M. H. The whole now first collected and revised. To which are prefixed his Life and death, by Bishop Burnet, and an Appendix to the Life, including the additional notes of R. Baxter* (London, 1805).

¹⁰³ Child, *A New discourse about trade*

¹⁰⁴ C. Davenant, *Discourses on the publick revenues, and on the trade of England* (London, 1698), pp.74 and 77.

This is a point forcefully made in Berg and Eger, *Luxury in the eighteenth century*.

¹⁰⁵ C. Davenant, *An essay upon the probable methods of making a people gainer in the ballance of trade* (London, 1699), pp.53-4. The inventor and merchant James Puckle is another telling example of this duality of the idea of industriousness in the last decades of the seventeenth century. He combines the economic argument with a moral and educational approach: 'The Time of Labouring, and industrious People well employed, is the best Commodity of any Country', thus 'by accustoming [idle Footmen and Servants] to Business in their Youths, beget in them such industrious Dispositions, as would prevent ... their becoming Beggars, or worse in Old Age.' J. Puckle, *England's path to wealth and honour, in a dialogue between an English-man and a Dutch-man*, (London, 1718, first edn. 1699), pp.25-6

¹⁰⁶ Muldrew also quotes R. Gough, *Human Nature displayed in the history of Myddle*, (London, 1834, first edn. 1701), p.29. This local historian does not extensively use "industrious" and out of 5 uses of 'industry', only one is not opposed directly to 'labour'.

¹⁰⁷ De Vries, *The industrious revolution*, pp.66-7, n.70

¹⁰⁸ Hont, 'The early Enlightenment debate on commerce and luxury', pp.395-403

¹⁰⁹ Defoe, *The Complete English Tradesman*, pp. 68, 101, 132. Quoted in de J. Vries, *The industrious revolution*, pp.66-7.

¹¹⁰ Defoe, *The Complete English Tradesman*, pp.65-8

¹¹¹ *The Harlot's progress*, *The Rake's Progress* (1731), and *Industry and Idleness* (1747) depict 'painful' labour as a key to economic and social success. See W. Hogarth and J. Trusler, *Hogarth Moralized. Being a complete edition of Hogarth's works containing near fourscore copper-plates ... with an explanation ... and a comment on their moral tendency, etc.* (London, 1768).

¹¹² B. Franklin, 'Self-Denial Not the Essence of Virtue', *The Pennsylvania Gazette*, 5 Feb. 1734.

¹¹³ It also shows that the educational discourse remains significant, too. The secondary interest of this analysis, which uses a database altogether different from the Google digitisation project, is to corroborate the more extensive Ngram results. The data is available through <http://bookworm.culturomics.org>.

¹¹⁴ R. C. Allen, *The British industrial revolution in global perspective* (Oxford, 2009); Allen and Weisdorf, 'Was there an "industrious revolution" before the industrial revolution?', is a recent exponent of the economic determinism school. Allen argues that industriousness was chiefly the result of hardship. Consumers had to put in more work to maintain their level of consumption rather than to increase it. Most of the 'consumer revolution

literature' is biased towards anthropological or psychological determinisms. See the seminal work by N.

McKendrick, J. Brewer and J. H. Plumb, *The birth of a consumer society, the commercialization of eighteenth-century England* (London, 1982). A third form of (rather unfortunate) determinism is bound to gain more prominence in the historiography with the development of crypto-genetic evolutionist theories like that proposed by G. Clark in his recent *Farewell to Alms* (Princeton, 2009).

¹¹⁵ Weber is close to Nietzsche's conception of genealogy: the psychological drive being an archetypical form of moral evolution.